

TECHNOLOGY DEPT.

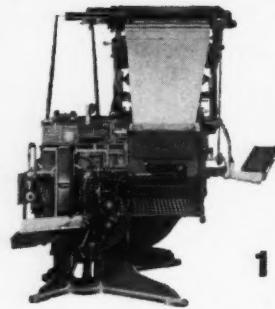
PUBLIC LIBRARY  
JUL 18 1951  
DETROIT

# The Inland Printer

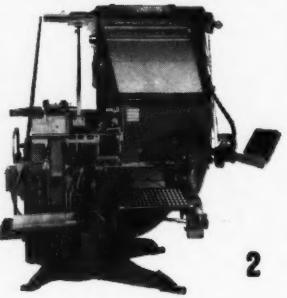


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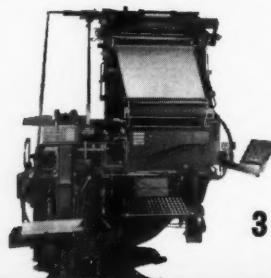
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**RESEARCH FITS  
LINOTYPE TO  
TODAY'S OPERATING  
PATTERN**



**RESEARCH FITS  
LINOTYPE TO  
TODAY'S OPERATING  
PATTERN**



**RESEARCH FITS  
LINOTYPE TO  
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PATTERN**

## ... AND LINOTYPE GIVES YOU A PATTERN FOR PROFIT!



**1. Speed . . .** The Blue Streak Comet . . . fastest, simplest, most economical straight-line machine ever made!

**2. Range . . .** The new Wide Range Single-Distributor Linotypes will keyboard a larger range of text and display fonts from main magazines than possible with any other 90-channel, non-mixer machines.

**3. Versatility . . .** The new Wide Range Mixer Linotypes . . . with unmatched capacity for display faces and small text faces, these versatile Linotypes enable matrices from two or more magazines to be composed in the same line.

After years of careful study of composing-room needs, we have newly engineered our entire series of Blue Streak Linotypes to give you the machines you've told us you wanted!

You wanted simple, rugged machines that cut maintenance costs. . . . The new Linotypes have fewer parts, require fewer adjustments and are more accessible.

You wanted ease of operation. . . . The fast-acting, conveniently-located controls of the new Linotypes simplify magazine shifting and machine settings. New safeties protect machine and matrices from damage.

You wanted versatility. . . . The new Linotypes answer every requirement profitably—from high-speed, straight-line composition to quick, easy mixing of 6- to 60-point faces.

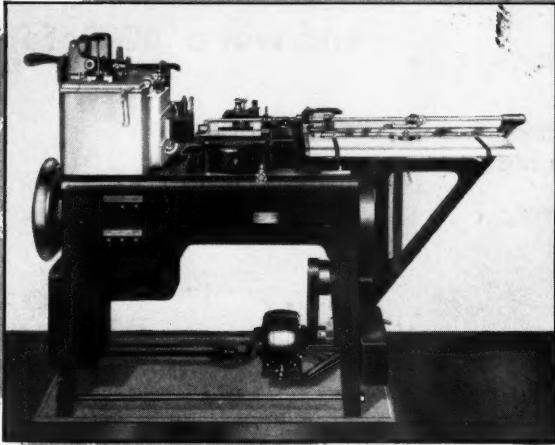
**Have your Linotype Production Engineer show you how these newly engineered machines can put more money in your pocket! Mergenthaler Linotype Company, 29 Ryerson Street, Brooklyn 5, New York.**

**4. Time-Saving . . .** Applicable to outstanding machines, the new ML Quadrader quads right, left and centers. Does away with hand quadding entirely!

**LEADERSHIP  
THROUGH RESEARCH**

**• LINOTYPE •**

Set in Caledonia, Spartan and Gothic Families  
All type has been photo-engraved



# *The* **EL ROD**

## *Offers All These Advantages*

- 1** A single Elrod provides a constant supply of leads, slugs, column rule, border rule and base material of standard or special heights for mounting cuts, and metal furniture for general composing room use.
- 2** The wide range of Elrod material—1-point to 36-points in thickness—all from one machine, is an important factor in keeping the work moving promptly and efficiently.
- 3** Formed in the mold as a continuous strip of metal, cooled and solidified under pressure, Elrod material is uniformly accurate, and most serviceable in meeting today's many printing requirements.
- 4** The use of Elrod material in full-length strips eliminates the need for "piecing" slugs or rule, disturbing standing forms, forced distribution and similar wasteful practices due to strip material shortages.
- 5** Simple in design and mechanism, as well as in operation, the Elrod gives the utmost in dependable service. Both operating costs and upkeep expense are most moderate.
- 6** The creditable standing of the Elrod with hundreds of commercial and publication plants, newspapers, trade compositors and others is assurance of proved equipment.

**Ludlow Typograph Company** 2032 Clybourn Avenue, Chicago 14, Illinois

Set in members of the Ludlow Tempo family

Published monthly by Maclean-Hunter Publishing Corporation, 300 West Jackson Boulevard, Chicago 6, Illinois. Subscription, \$5.00 a year in advance; single copies, 45 cents. (Send Canadian funds—\$5.50 a year; single copy, 50 cents)—to The Inland Printer, Terminal A, P. O. Box 100, Toronto. Foreign \$10.00 a year; three years, \$20.00. Entered as second-class matter, June 25, 1885 at the Post Office at Chicago, Illinois, under Act of March 3, 1879. Additional second-class entry at Lafayette, Indiana, under date of April 30, 1948. Copyrighted, 1931, Maclean-Hunter Publishing Corporation.

# Tell it to Kimberly-Clark

and win a \$50 Defense Bond!

An idea exchange service for you—  
the members of the Graphic Arts industry

Promotional pieces can  
also promote good will!

In the rush to sell your products, don't overlook the importance of selling good will. Our travel kit, presented to each passenger on the Santa Fe Super Chief, is an example of how this can be done through providing a "service." The kit contains Canasta, Bridge, and Rummy scorepads plus rules; stationery, stamped envelopes and postcards; matches, scratch pad; colorful travel folders about California, The Land of Pueblos, Grand Canyon and Indian Country; a complete Santa Fe time schedule, and a sizable booklet of interesting facts about all towns, places and sights along the entire Santa Fe system. By making each passenger's trip so much more enjoyable, we have evidence that this unique service has paid for itself many times over in good will toward our railroad.

*Arthur A. Dailey,  
General Advertising Manager,  
Santa Fe Railway System, Chicago, Illinois*

#### Ink-trap adjuster

In printing a 2-color job on a single color press, the second down ink often won't take properly over the first down ink. This can be corrected at times by a heatset vehicle or varnish and a mixture of one-half ounce each of paraffin and beeswax to the pound of the second ink. Such a mixture is available in the form of a compound from many ink manu-



facturers. A word of caution: such jobs cannot be overprinted with another ink, or varnished, as the wax will interfere.

*Walter R. Surgeon,  
Sigmund Ullman Co., Chicago, Ill.*



#### Static gets the quick "brush"!

When running coated stock on a Miehle vertical (or any cylinder press), static will often prevent the grippers from



taking the sheet off the cylinder. This is sometimes caused by the cylinder brush being set too tight. Loosen it slightly—and your problem may be solved!

*Russell Schember,  
Woodrow Press, Inc., New York, New York*

#### How to handle soft vignettes

One of the most difficult kinds of plates is one with a large area of soft vignette. To assist the printer, the electrotype finishing department can blend down the reverse side of the printing plate underneath the vignette. This allows less

pressure on that portion of the electro and reduces the printer's make-ready and "raking" time, yet gives him a good facsimile of the engraver's proof.

*Daniel J. Casey,  
Consolidated Production Service, Inc.,  
New York, N. Y.*

**Do you have an item of interest?  
Tell it to Kimberly-Clark!**

All items become the property of Kimberly-Clark. For each published item, a \$50 Defense Bond will be awarded to the sender. In case of similar contributions, only the first received will be eligible for an award. Address Idea Exchange Panel, Room 106, Kimberly-Clark Corporation, Neenah, Wisconsin.

\* \* \*

As paper is still on allocation, please help prevent the shortage from spreading further. And remember—you add crisp freshness and sparkling new sales appeal to all printing jobs—at less cost, with less waste—when they're done on fully-coated Kimberly-Clark papers. Use them whenever possible.

## Kimberly-Clark Corporation

NEENAH, WISCONSIN



Quality Machine-Coated Printing Papers

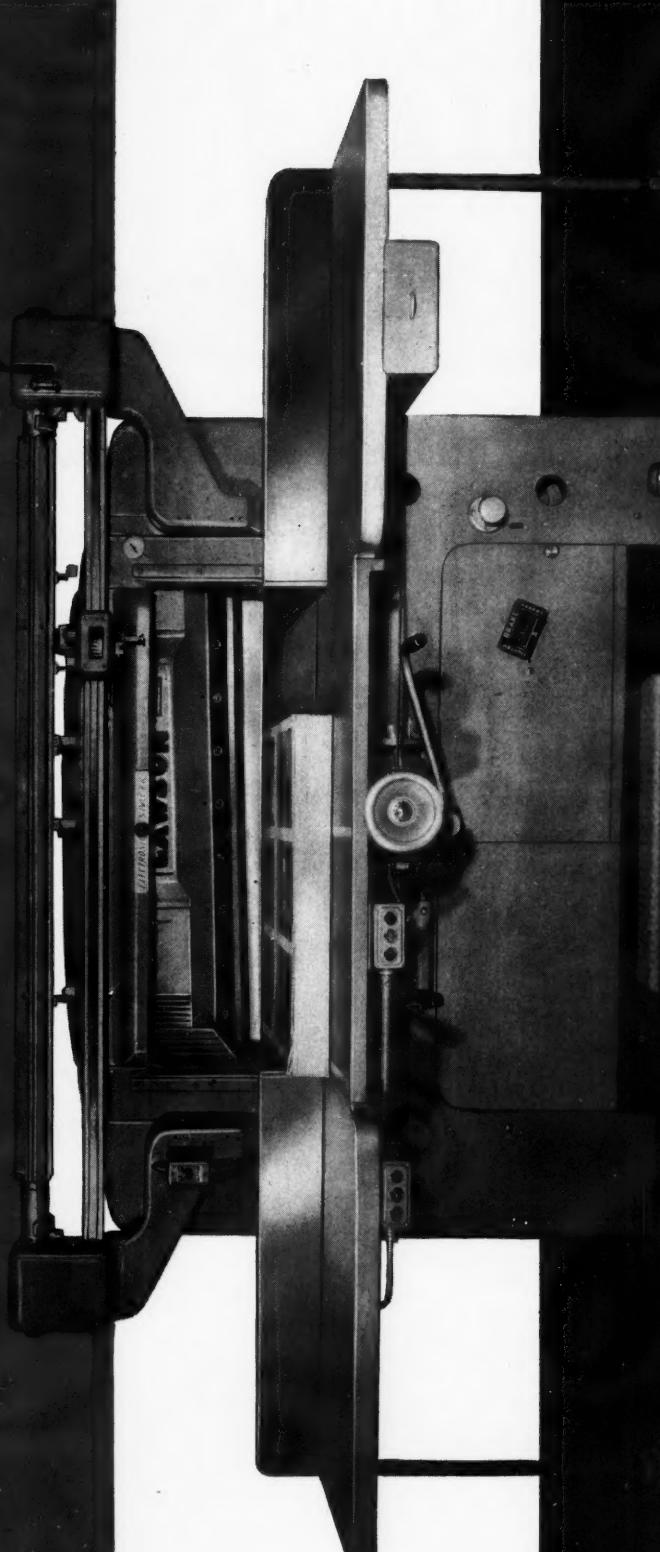
Hifect\* Enamel Lithofect\* Offset Enamel Trufect\* Multifect\*

\*T. M. REG. U. S. PAT. OFF.

# LAWSON 52" ELECTRONIC SPACER CUTTER

(MODEL 52-T-76 PATENTS PENDING)

## CUTS 76" SHEETS AT PROVIDENCE LITHOGRAPH CO.



A front view photograph of the new Lawson Heavy Duty 52" Electronic Spacer Cutter installed at Providence Lithograph Co., Providence, R. I. Note the extra long spacer bar to accommodate sheets up to 76" in length. The back gauge goes back a full 76", giving

you the advantage of splitting various combinations of large sheets, without requiring an 84" cutter. Add the plus values of the LAWSON hydraulically operated clamp and electronic spacer control and you have the best buy in cutters.

MAIN OFFICE 426 WEST 33rd STREET, NEW YORK  
CHICAGO • 628 SO. DEARBORN ST. PHILADELPHIA • BOURSE BLDG.  
BOSTON • 170 SUMMER ST.

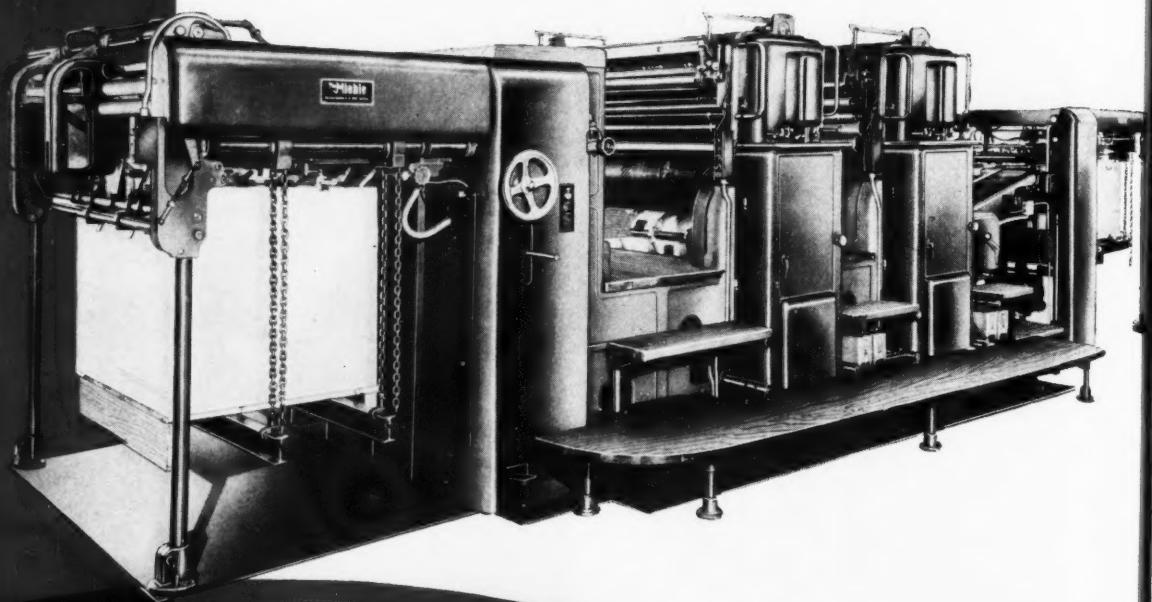


*investigate*

# the Miehle ROTARY

*for greater production and profits*

The high production and top quality relief printing of the new Miehle Sheet Fed Rotary Letterpress may be the answer to your problems. Figures tell the tale! Let us work out a comparison — for specific jobs — between your present costs and those possible with a Miehle Rotary.



- Unit Construction
- Single and Multi-Color
- Declutchable Cylinders—Simultaneous Plating
- Individual Makeready for Each Color
- Improved Sheet Handling

#### BUILT IN TWO SIZES

THE MIEHLE 61	THE MIEHLE 76
42 x 60 6000	MAXIMUM SHEET SIZE 52 x 76 SPEEDS UP TO 5500
	SINGLE AND MULTI-COLOR

The **Miehle**

**MIEHLE PRINTING PRESS & MANUFACTURING CO.**

*World's Largest Manufacturer of Sheet-Fed Presses*

**CHICAGO 8, ILLINOIS**

They mean a lot  
when you buy  
equipment



DESIGN



MANUFACTURE



SALES



SERVICE



ONE ORGANIZATION

You can depend on the Ability and Responsibility of the Lake Erie Organization

**LAKE ERIE**  
ENGINEERING CORP.  
BUFFALO, N.Y. U.S.A.

LAKE ERIE ®



### ACRAPLATE for Rubber and Plastic Printing Plates

Over 380 Acraplates are now in service...far more than all other makes of equipment combined. And there are far more models of Acraplate to select from when you buy...to assure that you get the most efficient machine possible for your specific purpose.

• **WRITE** for descriptive literature or recommendations. No obligation.

Please Mention THE INLAND PRINTER When Writing To Advertisers

## ABILITY

meaning the ability of the manufacturer to design and build equipment that is *efficient and dependable*.

LAKE ERIE is one of the world's largest manufacturers of...and a recognized leader in the development of...hydraulic machinery.

LAKE ERIE has had over fifteen continuous years of specialized experience in the development of hydraulic plate-making equipment.

## RESPONSIBILITY

meaning the manufacturer's responsibility for his equipment *after it is sold*.

LAKE ERIE equipment is designed, manufactured and serviced by one organization...whether it is sold direct or through an authorized agent. *There is no division of responsibility...and never any question about it.*

The first hydraulic plate-making equipment ever made by Lake Erie is still operating...and Lake Erie is still prepared to service it after fifteen years.

### LAKE ERIE ENGINEERING CORP.

504 Woodward Avenue, Buffalo 17, New York

*Offices in Principal Cities and Foreign Countries*



● Leading manufacturer of hydraulic presses—all sizes and types—stereotype molding...plastics molding...laminating...die sinking...metal working...forging...metal extrusion...waste wood and plywood...rubber vulcanizing...special purpose.

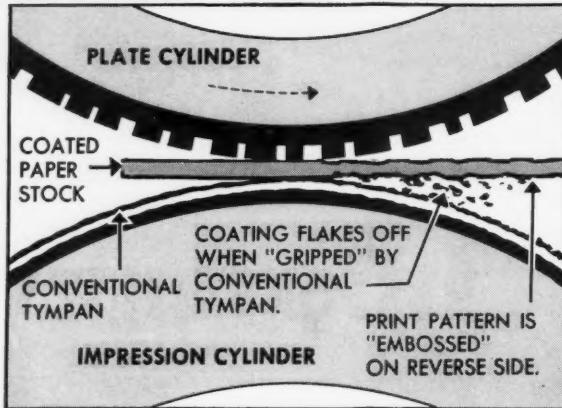


## "SPHEREKOTE" TYMPANS SOLVE 5 PRESSROOM PROBLEMS

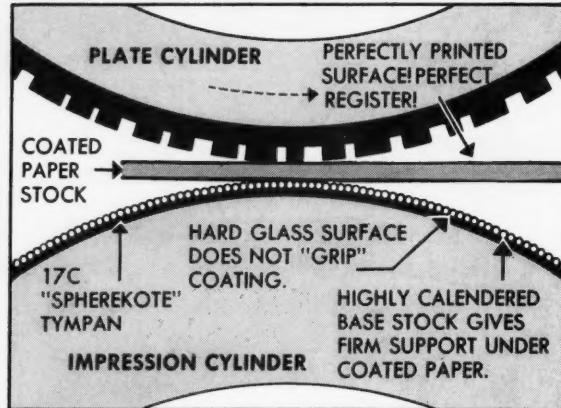


NO. 1

### Cuts lost press time on coated paper jobs



**CONVENTIONAL TYMPAN** "grips" coated stock during run—causing flakes of coating to pile up on the top sheet. Press must be stopped frequently for cleaning tympan. Coated stock often takes a permanent set which shows up as "embossing" on other side of the paper.



**SMOOTH GLASS SURFACE OF 17C "SPHEREKOTE" Tympan** offers no hold for stock to "grip"—flaking is eliminated. This highly calendered top sheet offers firm support to the coated paper as it receives the impression and prevents print pattern from showing on the other side.

#### USE THIS CHART FOR SELECTING "SPHEREKOTE" TYMPANS

PAPER	PRESS PROBLEMS SOLVED	TYPE
COATED	Flaking, Embossing, Register	17C
LABEL	Static, Long Runs, Accuracy	17C
BOND	Hardness, Ink Drying, Perforating	15D
ONIONSKIN	Static, Perforating, "Jogging" in delivery	15D
CARBON	Carbon "Pick-Off", Perforating, Static	15D

You'll get better printing with fewer press stops when you use these new *Engineered Top Sheets*. The hard, smooth glass surface and highly calendered base stock stand up for the longest runs. Coated papers do not flake off and pile up on the tympan.

Perfectly uniform caliper in "SPHEREKOTE" Tympons makes it easier to get pin-point register on finest color work. And, resistance to "embossing" makes register easier to hold for the longest runs.

Get "SPHEREKOTE" Tympons from your paper supplier—or mail coupon below for sample swatches and price lists.

#### "ENGINEERED TOP SHEETS"

#### WRITE TODAY FOR SWATCHES AND PRICES

Minnesota Mining & Mfg. Co.  
St. Paul 6, Minn.

Dept. AP 71

- Send swatches and price list
- Send name of my nearest supplier

Name.....

Company.....

Address.....

City and Zone..... State.....

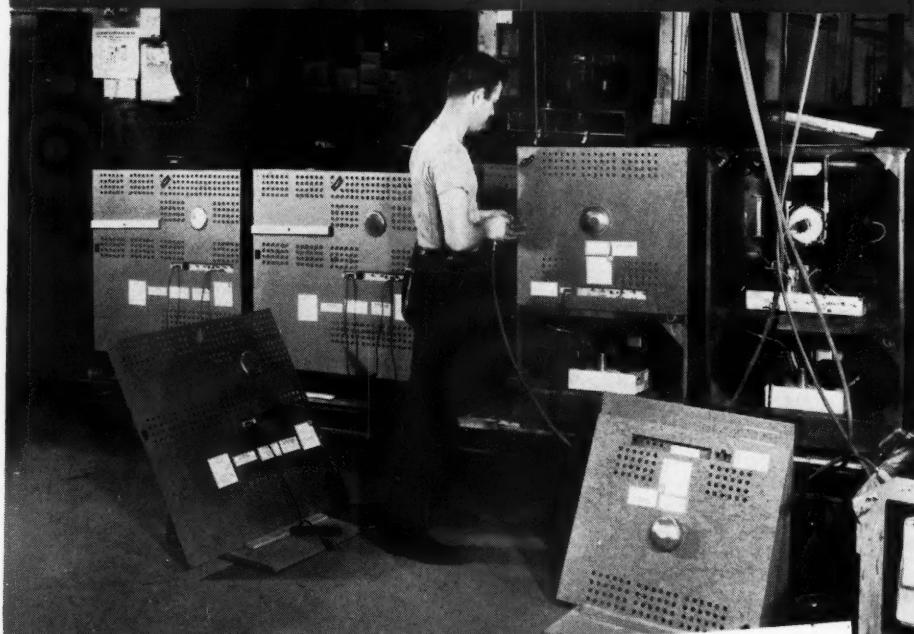
REG. U.S. PAT. OFF.  
**SPHEREKOTE**  
BRAND

**TYMPAN COVERS**

Made in U.S.A. by MINNESOTA MINING & MFG. CO., St. Paul 6, Minn., also makers of "Scotch" Brand Pressure-sensitive Tapes, "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: Minn. Mining & Mfg. Co., International Division, 270 Park Avenue, New York 17, N. Y. In Canada: Canadian Minnesota Mining & Mfg. Co., Ltd., London, Canada.

# PERVENAC Heat Seal Labeling

Solves Problem for  
Sparton Radio-Television



Mr. Ross Bowerman, Supervisor of Material Control, Sparton Radio-Television division of THE SPARKS-WITHINGTON COMPANY, reports a permanent bond despite high heat.

#### THE PROBLEM

Instructional labels which could be applied quickly and permanently to metal and wood surfaces were essential in assembling the sets. Labels had to withstand the heat generated by an operating television chassis.

#### THE SOLUTION

Pervenac with delayed action tack speeded production and adhered firmly despite high temperatures. The labels will always be in place and readable for future use.

*As a printer it will pay you to push Pervenac. Pervenac is Nashua's delayed action, heat activated dry label paper that is revolutionizing labeling in many diverse*

applications — from hot radio tubes to wet beer bottles — on metal, film, wood, enamel, glass and paperboard. Pervenac doesn't act up in storage or shipping . . . gives a quality job on offset or letterpress . . . doesn't tear at the edges, wrinkle or smear. Call your Pervenac distributor or write direct.

\*Registered Trade Mark  
Manufactured under patent 2,462,029



MAKES PAPER MAKE  
MONEY FOR YOU

NASHUA GUMMED AND COATED PAPER COMPANY  
NASHUA, NEW HAMPSHIRE

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I. J. Szper, 65 Ave. Niel, Paris



The ever-recurring excitement of new, fashionable and becoming clothes is one of the many nice things good printing helps bring to millions of American homes. In the pages of superbly printed magazines and through announcements, catalogues and brochures, feminine America finds the latest authentic news from the style centers of the world.

Because every detail of line, color and accessories must be shown to best advantage, Oxford Papers are standard for numerous fashion magazines and catalogues and for printed pieces by the million that help build sales.

Specify an Oxford grade the next time you want to be sure of maximum eye appeal for your finest presentations by letterpress, lithography or rotogravure.

## XFORD PAPERS

### Help Build Sales

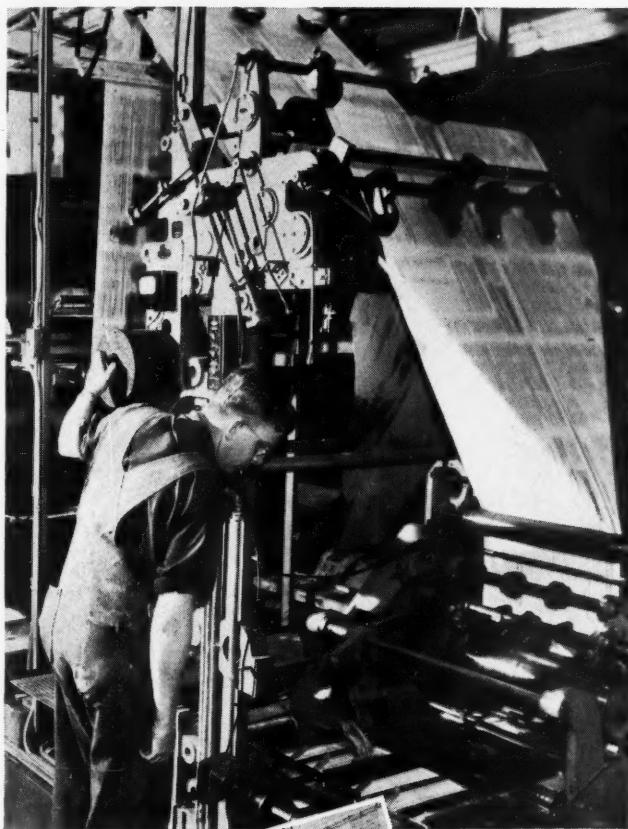


OXFORD PAPER COMPANY  
230 Park Avenue, New York 17, N.Y.

OXFORD MIAMI PAPER COMPANY  
35 East Wacker Drive, Chicago 1, Ill.

Mills at Rumford, Maine, and West Carrollton, Ohio

# Letterpress ★ Offset ★ Gravure



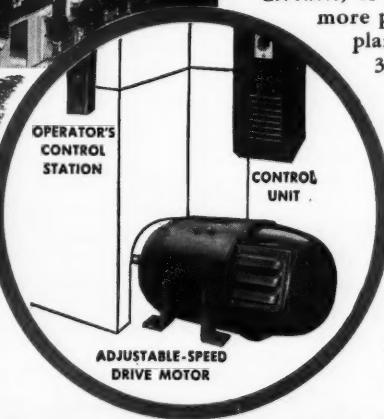
*For the  
right Speed*

through  
every phase of every job  
choose



operating from A-c. Circuits

Starting, stopping and speed changing are quick and yet smooth on any kind of press equipped with an *all-electric* Reliance V★S Drive. And the infinite speed selection always at your command through automatic control makes it easy to provide the exact speed required for maximum production and quality control in every step of every job. This is why Reliance V★S, the packaged *All-electric, Adjustable-speed Drive for A-c. Circuits*, is appearing on more and more presses in more and more plants. Write today for Bulletin 311 on packaged V★S Drives through 200 horsepower.



NEW, smaller, low-cost Reliance V★S Drives are available from 3/4 to 2 hp.—ask for Bulletin D-2101.

## RELIANCE ELECTRIC AND ENGINEERING CO.

"Motor-Drive is More Than Power" • 1101 Euclid Avenue, Cleveland 10, Ohio

**Finest printing costs less  
for General Electric...**



**...thanks to the revolutionary economy  
of *Consolidated Enamel Papers***

Wherever engineers are at work on new ideas for electrical living, you'll probably find copies of the General Electric Review.

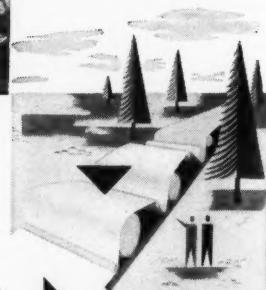
Published monthly by GE's research staff, the *Review's* articles provide an ever-current source of reference material and data on every phase of electricity from generation to distribution and use.

The printers of the *Review* have good reasons for specifying Consolidated Enamel Papers. Through careful comparison, they've found that Consolidated Enamels consistently deliver the fine printing qualities necessary

to reproduce delicately detailed drawings and photographs. Yet, thanks to the revolutionary process Consolidated pioneered, their cost averages 15 to 25% below old style enamels.

This same unusual combination of quality and economy is making friends for many alert printers the country over who recommend and specify Consolidated Enamel Papers for their finest jobs.

Why not test them on your own equipment against the enamels you're now using? Just ask your Consolidated Enamel Paper merchant for trial sheets.



► **Finest enamel paper quality at lower cost** is the direct result of the enameling method which Consolidated pioneered. Operating as a part of the papermaking machine, it eliminates many costly steps still required by other papermakers and produces highest quality paper, simultaneously enameled on both sides, in a single high-speed operation.

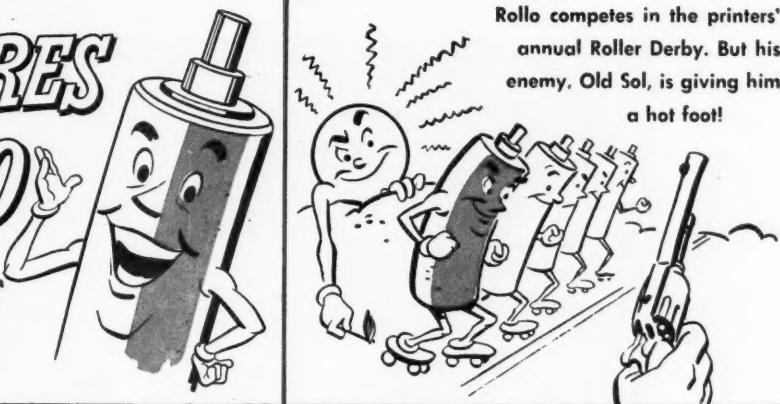
**Consolidated** ENAMEL PAPERS

PRODUCTION GLOSS • MODERN GLOSS • FLASH GLOSS

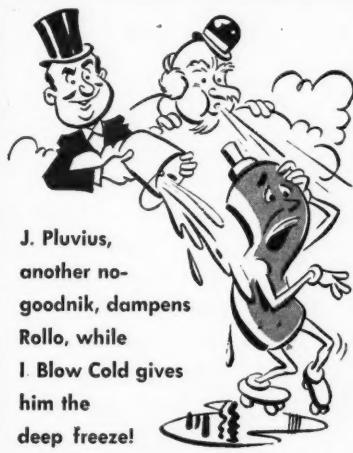
CONSOLIDATED WATER POWER & PAPER COMPANY • Makers of Consoweld—decorative and industrial laminates  
Main Offices: Wisconsin Rapids, Wisconsin • Sales Offices: 135 So. La Salle St., Chicago 3, Illinois © C.W.P. & P. Co.

# ADVENTURES of ROLLO

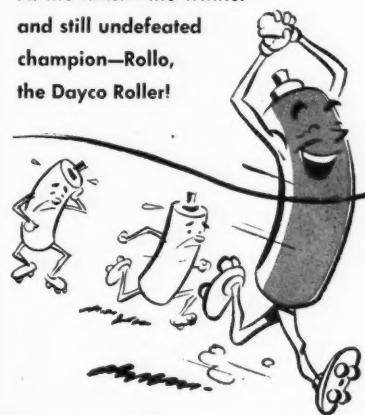
the Dayco Roller



At the half, Inky Sludge conks Rollo with oil-base inks!



At the finish—the winner and still undefeated champion—Rollo, the Dayco Roller!



## Dayco Rollers just roll and roll!



Now is the time to switch to a roller that will see you through for years and years—the Dayco Roller.

With Dayco Rollers the seasons, the weather, the humidity, or oil-base inks seem to make little difference. Diameter, tack, size, softness, stay the same whatever the weather, whatever working conditions. Daycos made obsolete the idea that a printer had to change rollers when he changed to red flannels, and back again. Winter, summer, spring, fall—to Daycos they make no difference at all! Nothing rolls like a Dayco Roller, (except maybe Old Man River). Write: *The Dayton Rubber Company, Printing Roller Division, Dayton 1, Ohio.*

DAYTON RUBBER COMPANY, DAYTON, OHIO

# Dayton Rubber

PIONEERS OF IMPROVEMENTS FOR BETTER PRINTING

When Writing These Advertisers, Please Mention THE INLAND PRINTER

THERE'S A TYPE FACE FOR EVERYBODY



# CENTURY. *the Practical type*

No. 4 OF A SERIES . . . Types shown are  
ATF Century Oldstyle, Schoolbook, School-  
book Italic and Bold.

- This is the classic, capable type that generations of imaginative advertisers and printers have wooed in their rivalry for finer printing. It was originated by ATF and endowed with unsurpassed color, legibility and distinctiveness. With all its dignity Century excels in the art of making prospects drool; is just enough of the gold digger to keep sales managers in a perennial state of healthy excitement. Six fadeless favorites in Oldstyle and Schoolbook, and seven others, ready at your ATF Branch. For best results print from foundry type. There's a type face for everybody, and Century is for you!

### *Branches in Principal Cities*



# AMERICAN TYPE FOUNDERS

*200 Elmora Avenue, Elizabeth B, New Jersey*



Wood Thrush, by Allan D. Cruickshank

# STANDING ON HIS OWN

With birds, humans, or a case of paper . . .

a firm foundation is much to be desired.

St. Regis paper stands on its own. As growers of trees, producers of pulp, and operators of multiple mills—we can select and blend an ideal sheet for every purpose. We can control that sheet to establish grade uniformity.

The result is consistently a sheet of paper that handles well on the press—a printed job that pleases the customer.

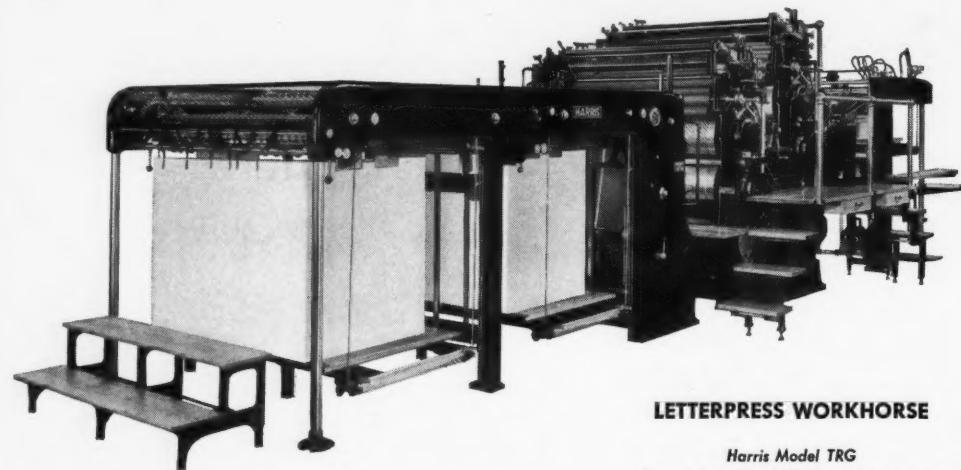
Printing, Publication and Converting Paper Division



Sales Subsidiary of St. Regis Paper Company

230 Park Avenue, New York 17, N. Y.  
230 N. Michigan Avenue, Chicago 1, Ill.  
218 Martin Brown Bldg., Louisville 2, Ky.

*"fine paper for fine printing"*



**LETTERPRESS WORKHORSE**

*Harris Model TRG  
Two-Color 45 x 65" Rotary Letterpress*

## By HARRIS...out of Rotary-Know-How

The pedigree of this Harris two-color letterpress goes back just as many years as Harris offset presses—more in fact! And these years of experience in rotary press engineering have paid off in each generation. For instance, this new press has a double delivery system . . . cylinders that take standard-diameter premade-ready plates . . . five form rollers . . . a single transfer cylinder between colors.

These are just a few examples of Harris' practical evolutionary rotary design.

To put it another way: This press puts 70% more salable sheets in the delivery piles per day than its father. Think how that looks on the books of plants which have installed this new Harris work horse!

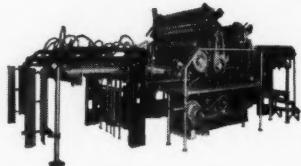
**HARRIS-SEYBOLD COMPANY  
DEPT. D, GENERAL OFFICES, CLEVELAND 5, OHIO**



**OL' ADAM** (*Harris Model E1*)  
The first Harris (1896) was a  
rotary envelope letterpress . . .  
still being shipped 30 years later.



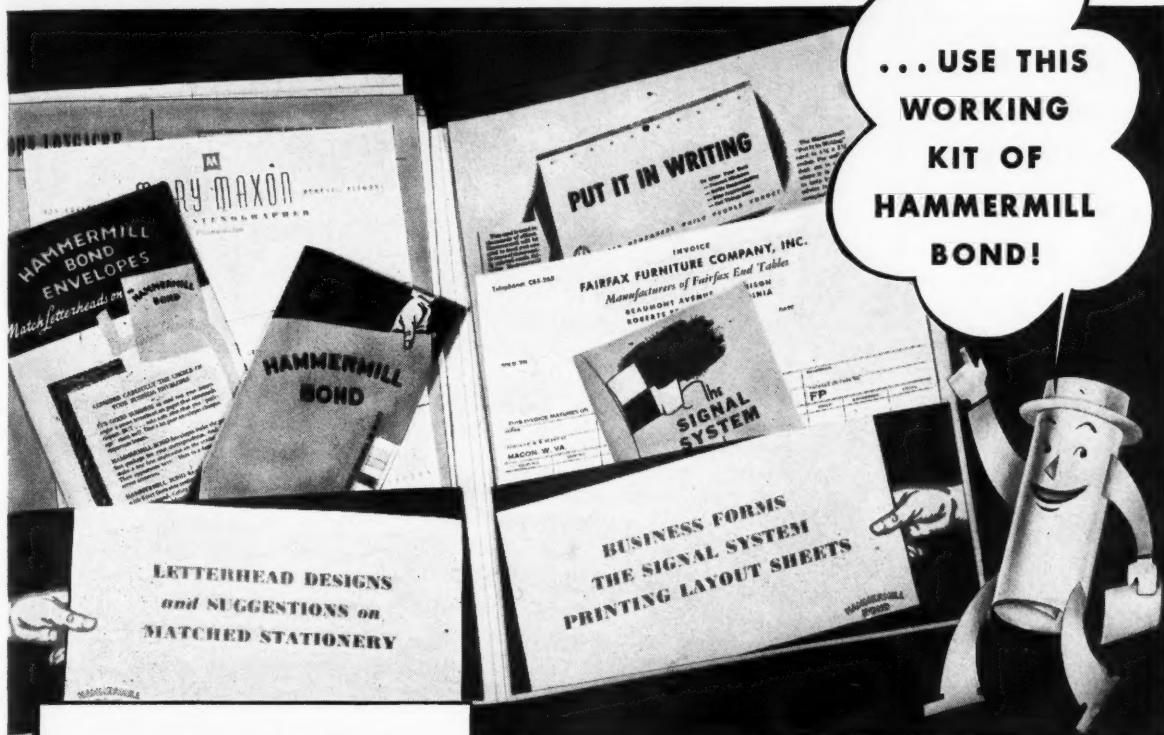
**GRANDSIRE** (*Harris Model HS*)  
First of the big Harris multicolor  
rotary letterpresses, for high-  
quality sheet-fed work. (1927)



**SIRE** (*Harris Model TD*)  
Another two-color letterpress, still  
at work on some of the nation's  
top-quality magazines. (1932)

# When they "Call in the Printer"...

... USE THIS  
WORKING  
KIT OF  
HAMMERMILL  
BOND!



"You couldn't stay in business without your printer..."

That's what Hammermill's national advertising is telling America's businessmen. Turn this good advice into profitable orders with the Hammermill Bond Working Kit!

You can get orders for the kind of printing they need.

Here's a complete, practical portfolio of useful ideas that you can put to work to sell better business printing on Hammermill Bond.

**LEFT-HAND POCKET CONTAINS:**

23 new designs for letterheads, four-page letters and matching envelopes — produced with simple arrangements of type, rule and art which any printer can duplicate.

Hammermill Bond envelope folder showing sizes and colors available. Sample Book containing samples of Hammermill Bond colors, weights and finishes.

Hammermill Letterhead layout sheets.

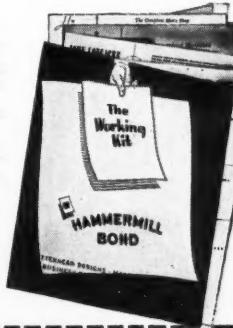
**RIGHT-HAND POCKET CONTAINS:**

Specimen printed forms for a variety of business needs. Helpful to customers in planning time-saving forms that cut down errors and waste.

36 Memo Form Designs adaptable to most customers' needs.

"The Signal System" idea-folder which outlines a practical way to increase office efficiency. Hammermill form layout sheets.

*IT'S FREE!  
Send coupon for your kit now!*



Hammermill Paper Company,  
1601 East Lake Road, Erie 6, Pennsylvania.

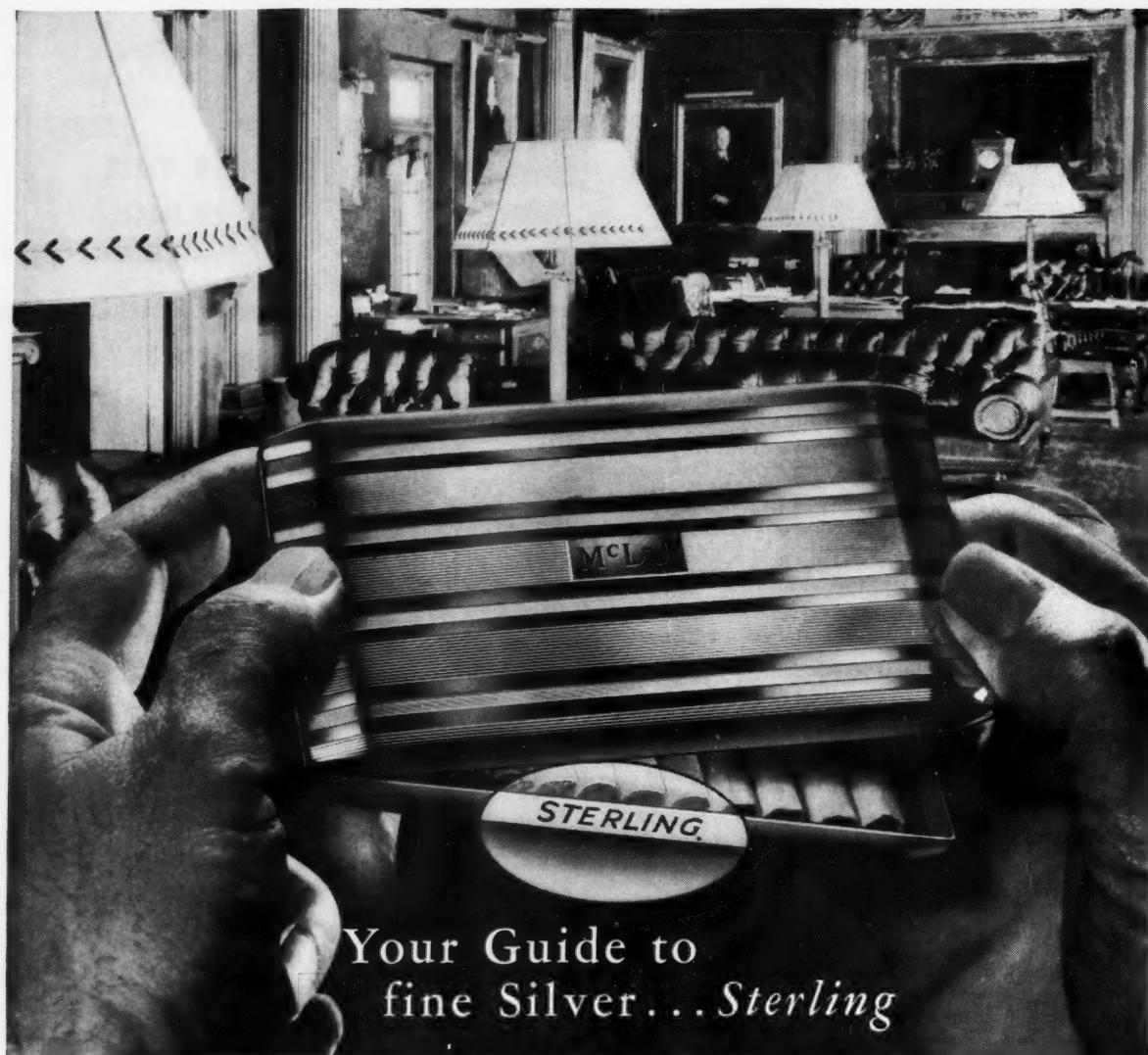
Please send me—FREE—the Working Kit of Hammermill Bond.

Name \_\_\_\_\_

Position \_\_\_\_\_

(Please attach to, or write on, your business letterhead) IP-JUL

# HAMMERMILL BOND



THE READING ROOM OF THE ALGONQUIN CLUB, BOSTON. Photograph by Nickolas Muray

## Your Guide to Fine Papers...



McLaurin-Jones Papers are advertised regularly in NEWSWEEK and BUSINESS WEEK

"A PIONEER IN PAPER PERFECTION"

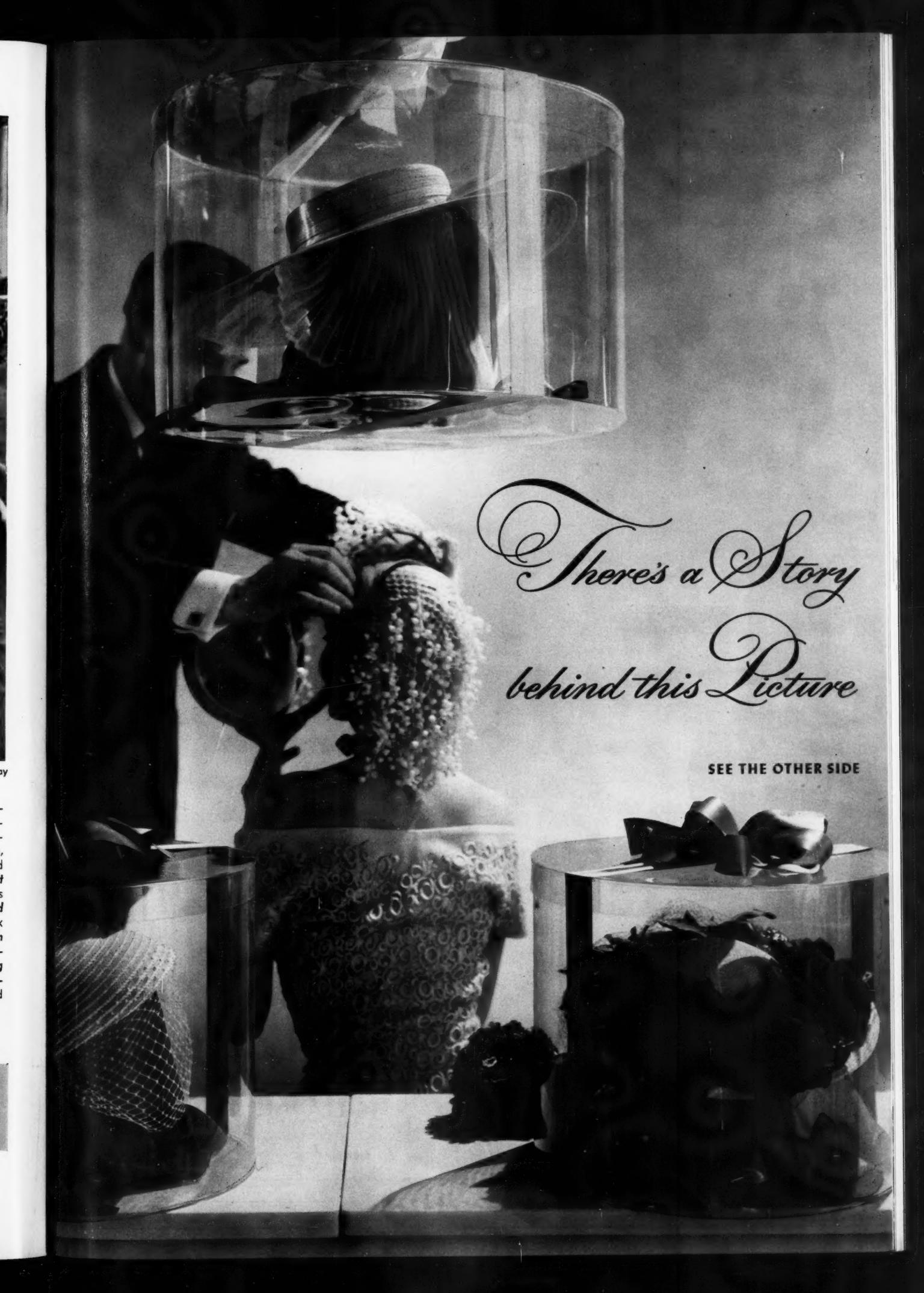
**MC LAURIN-JONES COMPANY**

BROOKFIELD, MASSACHUSETTS

Offices: New York • Chicago • Los Angeles

The name, McLaurin-Jones Company is your assurance of superior-quality papers for printing and packaging purposes—a name that is famous throughout the world for generations of skill and craftsmanship in the creation of new and improved papers for business and industry.

Among the wide range of McLaurin-Jones papers, famed for their excellence, are: **Waretone**, mirror-finish coated paper for printing, label, box covering, cover and postcard work. **Guaranteed Flat Gummed Papers** for labels, seals and stickers. **Old Tavern Gold and Silver Metallics** for labels, box work and printed pieces. **Relyon Reproduction Paper** for the printing trade. A full line of **Sealing Tapes, Stays, and Gummed Cambries** for boxes, cartons, and containers.



*There's a Story  
behind this Picture*

SEE THE OTHER SIDE

# *How the picture was reproduced*



Copy was an Ektachrome transparency.

Contact continuous-tone separations were made on Kodak Tri-X Pan Plates. Projection positives were made on Kodak Commercial Plates.

Line negatives and positives for type matter were made on Kodalith Ortho Film, Type 2.

Developers were D-11 and Kodalith Developer.

After retouching of continuous-tone positives, all positives were assembled using a blueprint keyplate as guide. Screened at 175 lines, carbon tissues were exposed to positives, transferred to copper plates, which were etched, inspected, and made ready for the press, in this case a 4-color sheet-fed gravure press.

**GRAPHIC ARTS DIVISION**  
**EASTMAN KODAK COMPANY, ROCHESTER 4, N.Y.**

*from copy*



*to metal*



*it's*

**KODAK**

**Kodak**

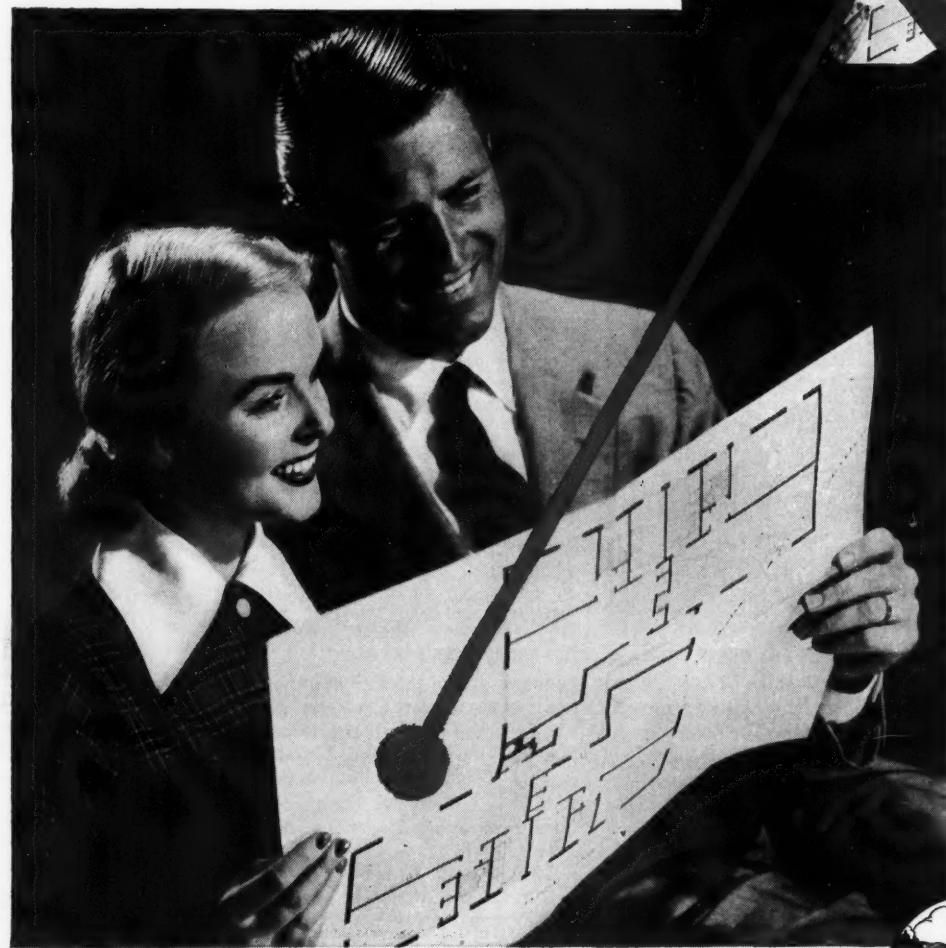
**EASY ON THE PRESS... EASY ON THE EYES**

**INTERNATIONAL**

# TICONDEROGA TEXT

When you need a match, specify **Ticonderoga Text** . . . match envelopes and coverweight in 7 watermarked colors plus cream and Brite White, laid or wove, plain or deckle-edged. You'll get truly distinctive appearance in brochures, book jackets, programs, menus, announcements, etc. . . . at surprisingly low cost. Versatile **Ticonderoga Text** is easy on any press . . . offset, letterpress or gravure.

International Paper Company, New York 17, N. Y.



**INTERNATIONAL PAPERS**  
*for printing and converting*



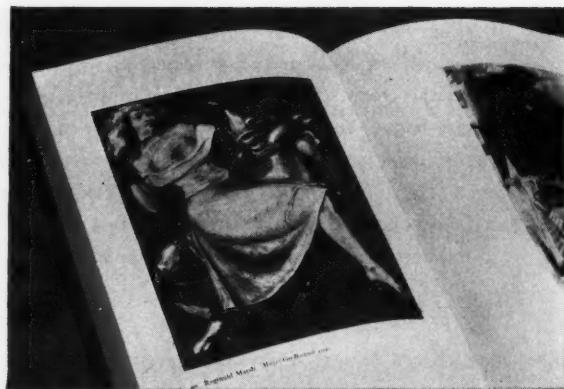
For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"

*A desk-size machine that makes*

# QUALITY 120-LINE ENGRAVINGS automatically!



**NEW PROCESS COMBINES CONVENIENCE WITH QUALITY.** The Scan-a-graver, Fairchild's automatic engraving machine, now serves newspapers and commercial printers in more than 500 installations the country over. Day after day, under the pressure of tight production schedules, this unique engraving plant demonstrates its ability to turn out high-quality reproductions with conveniences never before known in the graphic arts field.



**ART-MUSEUM CATALOG CONTAINS 52 SCAN-A-GRAVINGS.** Proof that the Scan-a-gravings of today can satisfy even the severest quality requirements is shown in an art-museum catalog containing 52 black-and-white halftone reproductions of full-color paintings. The quality of the 120-line reproductions—all of them made from Scan-a-gravings, ranging from 3 x 5 to 6 x 7 inches—is considered outstanding for this kind of work.



**"ONE OF THE FINEST PRINTING JOBS SEEN ANYWHERE."** Scan-a-graver user, *The Daily News-Tribune*, LaSalle, Ill. newspaper, was recently awarded the 1951 F. Wayland Ayer Cup for excellence in typography, presswork, and make-up. According to the paper's mechanical superintendent, the Scan-a-gravings used in the award-winning edition were said to have played an important role in winning the award. Said the judges: "One of the finest printing jobs we have seen anywhere at any time."



**JOB SHOPS THRIVE ON PLASTIC-CUT BUSINESS.** The convenience and economy of the Fairchild Scan-a-graver has brought new life into the job-printing business. Many shops have been able to offer while-you-wait engraving service at lower prices than they previously charged for one- or two-day service. Until recently, most of this work has been limited to the 65- and 85-line field, but the perfection of the new 120-line Fairchild Scan-a-graver has now opened new horizons to the job printer.

● For more data on the Fairchild Scan-a-graver, write today to Fairchild Camera and Instrument Corporation, 88-06 Van Wyck Boulevard, Jamaica 1, N. Y., Dept. 100-23F.

**FAIRCHILD**  
**SCAN-A-GRAVER**



## AN INDEX FOR EVERY USE!

That is only another way of saying, "If you have an indexing problem you want to lick, see Aigner." It makes sense, for the G. J. Aigner Company is the world's leading manufacturer of indexes and index systems. We've been in business for over 40 years and by now the word has gotten around that the G. J. Aigner Company has the data and facilities to produce any type of index anyone could want.

One of our customers—a printer by trade—got the word the other day. He came in for help on the indexing of a catalog job he was after. The job included the complete printing of 1000 catalogs of 250 pages each. He was the only printer who furnished a complete quote—including indexes. He got the job. G. J. Aigner did the indexing and billed the printer; he added on his normal mark-up and shipped his bill off to the client. Everyone was happy—except the printers who didn't get the job.

If you have ever missed out on a bid because you failed to furnish a complete quote, call or write the G. J. Aigner Company and see how we can help you give your clients a complete service. We have two large plants to serve you. You'll find the addresses listed below.

**Aigner**  
**INDEXES**

Chicago: 418 S. Clinton Street  
New York: 97 Reade Street

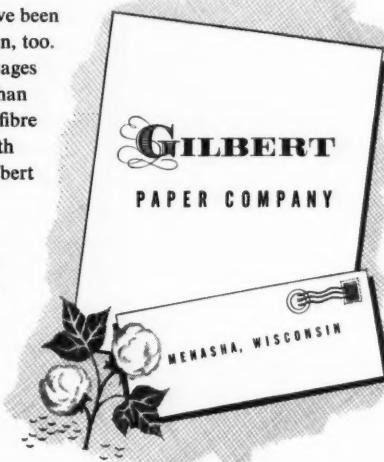


## A message to Garcia...

"...find General Garcia . . . he's somewhere in Cuba . . . deliver your message." Such were the orders given by President McKinley to a fellow named Rowan. Though he had never been to Cuba, Rowan set about finding his man without further question; and find him he did, after hacking his arm-weary way through dense jungles and fighting stray Spanish deserters. Even getting to Cuba required a perilous journey in a leaky, open boat. It was a sterling example of courage and initiative.

Rowan's message might well have been on a Gilbert paper . . . popular then, too. For your customer's business messages today, also, there is nothing finer than crisp, sparkling white, new cotton fibre content Gilbert Quality Papers with matching envelopes. Ask your Gilbert Merchant for samples.

Elbert Hubbard's fiery epistle, "A Message to Garcia," immortalized Rowan's feat. Though written in 1899, it is still sparkling reading today. If you would like a copy or two, drop us a line. They are yours while the supply lasts.

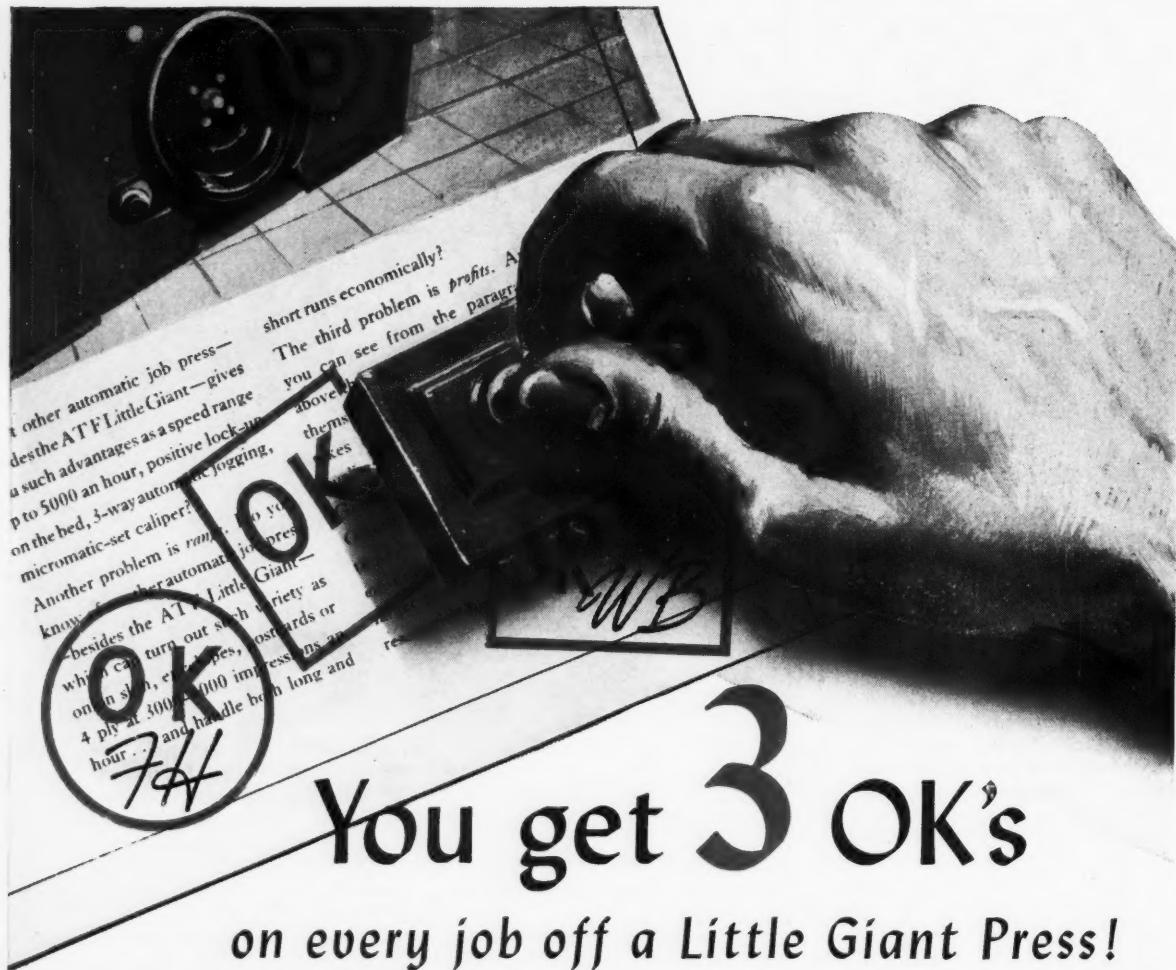


BOND • ONIONSKIN • LEDGER

INDEX BRISTOL • MANUSCRIPT COVER • VELLUM • SAFETY  
REPRODUCTION • BANKNOTE PAPERS

A good letterhead is always better-printed on a Gilbert Bond





# You get 3 OK's on every job off a Little Giant Press!

The *operator* approves. He likes the ATF Little Giant's 3-lb. ink fountain, automatic press trip, automatic double rolling, variable speed control and other features adding up to *ease of operation*.

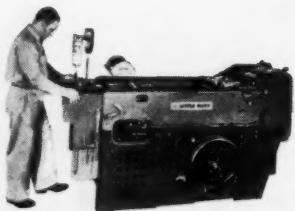
The *customer* approves. He likes the quality of work turned out on the ATF Little Giant... the better register, better impression, better ink distribution resulting from such features as universal setting of grippers, wide and thick bronze bed tracks, full coverage by all three form rollers.

And you approve. The high *production* of the ATF Little Giant (up to 5000 an hour) and its wide *range* (onion skin to 4-ply, long run or short run) mean you can handle many jobs on the Little Giant more *profitably* than on larger presses.

*Immediate deliveries.* Availability of materials now makes it possible to offer prompt delivery. Ask the ATF representative to show you substantiating facts and figures about the profit possibilities in the ATF Little Giant automatic cylinder press.

**ATF**

Better, More Profitable Printing from the Widest Line of Printing Presses



## American Type Founders

200 ELMORA AVENUE, ELIZABETH B., NEW JERSEY

**Branches in principal cities.** Manufacturers of Kelly Presses, Little Giant Presses, Chief Offset Presses, ATF-Webendorfer Web-fed Offset Presses, ATF-Klingrose Gravure Presses, Foundry Type and Process Cameras. Distributors of Mann Offset Presses, Challenge, Chandler & Price, Hamilton, Rosback and Vandercook Equipment for Composing Room, Press Room and Bindery.

# PLAN FOR QUALITY

## **Letterpress**

HI-ARTS  
ASHOKAN  
ZENA  
CATSKILL  
CANFOLD  
M-C FOLDING  
VELVETONE  
SOFTONE  
ESOPUS TINTS  
ESOPUS POSTCARD

## **Offset-Litho**

HI-ARTS LITHO C.1S.  
ZENAGLOSS OFFSET C.2S.  
LITHOGLOSS C.1S.  
CATSKILL LITHO C.1S.  
CATSKILL OFFSET C.2S.  
ESOPUS POSTCARD C.2S.

In printing as in yachting,  
**CRAFTSMANSHIP** depends upon both the  
craftsman and the "ship."

**Cantine's Coated Papers are a vehicle  
that means "smooth sailing"  
for printing of the highest quality.**

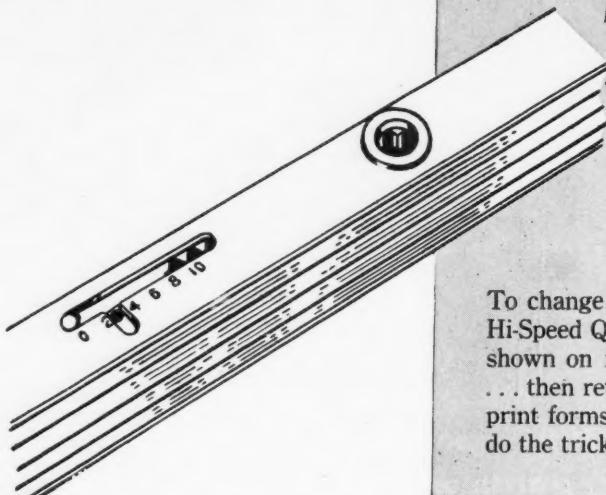
# *Cantine's Coated Papers*

THE MARTIN CANTINE COMPANY

Coated Papers exclusively since 1888

Saugerties, N. Y., New York, Chicago

## *It's a Trick of the Trade*



To change imprints without losing register, use Hi-Speed Quoins. Just record setting of quoins as shown on indicator . . . unlock . . . change slugs . . . then return to original setting. For small imprint forms, there's a 3" Hi-Speed Quoin that will do the trick.

*but it's no trick to make more money with*

## Challenge Hi-Speed Quoins



**Challenge**

TRADE-MARK ®

DEALERS IN ALL PRINCIPAL CITIES

**THE CHALLENGE MACHINERY CO.**

Office and Factories: Grand Haven, Michigan  
"Over 50 Years in Service of the Graphic Arts"

686

For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"

# MEAD

## *papers*

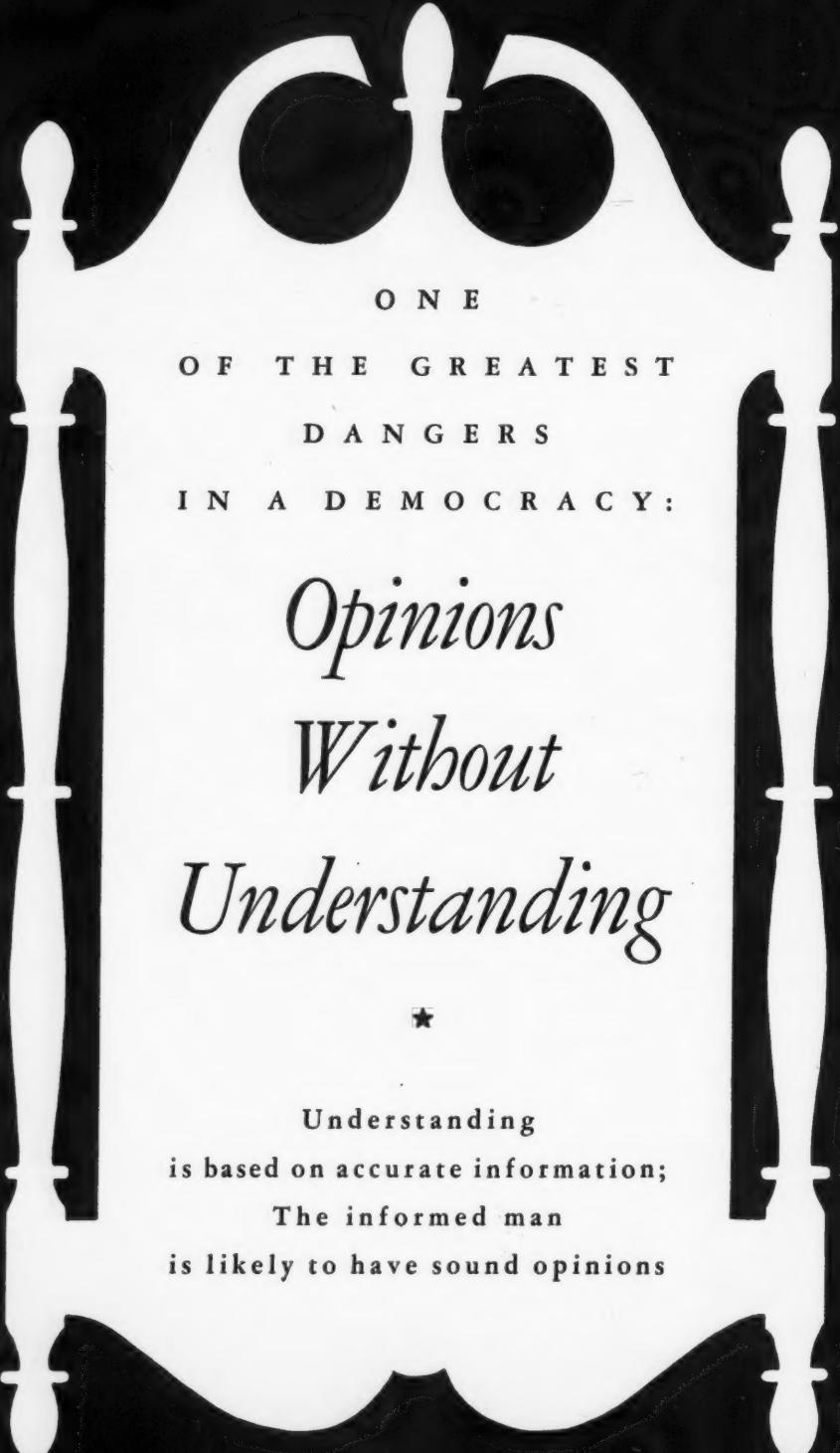
Mead Richfold Enamel is a superior coated paper produced by modern methods for fine letterpress printing. And Mead Richgloss Offset Enamel is the companion coated for offset lithography. Available at a moderate cost, these glossy, easy-printing, easy-folding enamels are ideal for brilliant effects in color or in black and white.



**THE MEAD CORPORATION** "PAPER MAKERS TO AMERICA"

Sales Offices: The Mead Sales Company, 118 W. First St., Dayton 2-New York-Chicago-Boston-Philadelphia

For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"



ONE  
OF THE GREATEST  
DANGERS  
IN A DEMOCRACY:

*Opinions  
Without  
Understanding*



Understanding  
is based on accurate information;  
The informed man  
is likely to have sound opinions

# Profit and Quality Are Dependent on Smooth Departmental Co-operation

• NO PRINTING PLANT can live and grow unless every department within it sets and maintains a high standard of craftsmanship. If one—just one—fails to keep in step and on a par with the others, the work of the plant suffers to the extent of the dereliction.

Responsibility centers in the management—the owners, the Big Boss, or general manager—call him what you will—for it is he who formulates long-range plans and puts company policies into motion. He is the hub, the nerve center, as it were, of the entire plant and as such should be an inspiration to all, from his assistant down to the lowliest charwoman.

Production is the heart of the entire plant. The production manager's shoulders must be strong and broad; he must be a Beelzebub and a saint, a diplomat and a dictator, with the patience of Job and the tongue of a shrew—each to be called on if and when necessary. And, brother, they are necessary. For on him charges hell from all sides—from the office as well as the plant. He is the bridge between Management and Labor, sniped at by each, often unfairly.

#### **Production Manager's Job**

His main duty, however, is to see that the work gets done. He must rout it through the various mechanical departments under his direction in such a way that it is produced in the most economical manner and delivered as promised. He must have a thorough knowledge of all departments; he must be capable of making decisions, and have records at his fingertips so that he can make them.

He must plan press runs, ever keeping before him complete data so as to avoid overloading one press while others are standing idle. And he must, by all means, know the presses and what they are capable of doing.

This scheduling is a matter of great importance. Much thought should be given it. Sufficient time to do the job should be allotted each department. No job should be started that would require shelving others already in production unless delivery times on those jobs are set back. This is only common decency and regard for both customer and workers.

A schedule for the stockroom should be set up so that the paper can be cut and on the pressroom floor by the time the forms are locked or plates are ready. A careful inventory should be maintained at all times so that general jobs can be taken care of without special purchase. All shops have their peculiarities in this respect; no two are alike.

These are only highlights of a production manager's job. No sinecure is it; if you doubt it, question one. It'll not take him long to tell you what's what.

Composing takes the first steps toward the completed job. In the hands of the foreman of that department rests much of the reputation of the plant. For if the design has no merit and spacing is not correct, all the high-speed presses, careful

makereadies, and beautiful inks available cannot make up for what it lacks.

Composing room work breaks down into two categories: that which is designed outside (by agencies, artists, designers within the client's own organization, and the like) and that which is designed in the plant itself. About the former there is much to be said. And many problems to face and solve.

#### **Composing Room Headaches**

First of all comes one that has caused this writer many gray hairs: beautiful layouts that cannot be fitted with type. Display lines are, more often than not, lettered to a size halfway between two actual type sizes so that it's simply impossible to interpret the layout correctly. Or incorrect space is allowed for body matter so that 8-point solid has to be resorted to instead of the 10-point leaded that was specified. When the best is done that can be done and proofs are sent out, the designer usually begins to raise several kinds of Cain because the layout was not followed. So revisions are made and in the end a type treatment is obtained that is often no better than the first. And all because the self-styled layout man hadn't stooped to such a menial task as to do a little multiplying. Or used a little common horse-sense.

Copyfitting is no longer a problem. Any one of the dozen or so systems that have been given publicity in the trade journals can be used. It's a matter of only a few hours to learn how it's done. Aside from that, experience is a very fine teacher—



Members of Printing Industries of Philadelphia held a country club outing. At head table of dinner climaxing the day were, from left, Stanley E. Haigh and Ralph V. DeKalb, vice-presidents of PI of P; J. Wallace Scott, Jr., president, Raymond Blattenberger; and C. A. Schauble, treasurer.

perhaps, for some, it is much better than books and charts.

Now comes the second category: the problem of design within the plant. Not much of that kind of work is done nowadays; most is done outside or in a department more closely connected with sales and production. But when it does come in, the man responsible should be given time for thought and production.

Ideas that possess distinctiveness do not pop into a man's head at will. A half-dozen or a dozen thumb-nail sketches are often necessary before a workable idea presents itself.

He's got to have something to work with, too. Type, especially, in all sizes and variations (condensed, italic, bold). Many dollar-minded bosses are very proud of their fast presses and bindery equipment, and ashamed of their composing room, when the feelings should be reversed. "You can make money only when the presses are running," they argue. Nay, not so. The compositor contributes as much to the finished job as the pressman; to some, more. *For his work is the foundation on which the entire job is built.*

#### **Old-Fashioned Gingerbread**

It behooves the foreman, if it is he who must do the designing, to study the trade magazines and the work of others and thus remain in step with what is going on elsewhere. Just because flowery borders and centered lines were correct when grandpap was able to thrill the gals is no argument for their use today. They are not entirely obsolete, to be sure; used with discretion they serve better than many of the outlandish, involved designs effected by some designers ("haywire" typography, L. B. Siegfried calls it).

This is a streamlined age and typographic design should be in keeping. Why put a lot of gingerbread in a piece of printing or twist the various units up in such a way as to emasculate the job, especially when by so doing you do not capture the spirit of the age, the piece, or the business? "Any typographer who succumbs to the temptation of minimizing readability and sales effectiveness through undue emphasis on the art appeal, is flouting basic

concepts of his calling," declares Mr. Siegfried. But many still do.

Money should be set aside regularly for replacement of types. Styles in type faces change just as do styles in women's hats, and almost as fast. "Modern" never comes, but trends change. What we do today will be laughed at next year just as what we did last year is scoffed at today. It should be our never-failing duty to at least keep in step.

The old stand-bys—the tried and proved Garamond, Bodoni, Caslon—are here to stay; only the faces used for display experience change—the faces and the way they are used.

#### **Adequate Records Vital**

The first duty of a composing room foreman after receiving copy is to make adequate record so that he will know at all times where a job is and how much more time it will require to complete it. With the close scheduling necessary to meet the demands of delivery, often the composing room gets behind. It's a good thing to have the information when a call comes; it may soften the wrath of many.

The job made up, the foreman should study the proof and make changes in spacing thereon. A small matter, some claim, but the transposition of a few points here and there, thus giving better grouping to units, can improve a job immeasurably. Some may argue that it is time-consuming—that the job doesn't warrant the extra cost—but *every job, no matter how small and cheap, has the moral right to be done in the best manner possible.* Those who think and argue otherwise are not craftsmen.

Clean, sharp proofs reflect the pride of a company in just the same

## *Conventions*

### *What—Where—When*

**International Association of Printing House Craftsmen.** Statler Hotel, Boston. August 19, 20, 21, 22

**National Association of Photo-Lithographers.** Statler Hotel, Buffalo, New York, September 5, 6, 7, 8

**International Typographic Composition Association.** Hotel Windsor, Montreal, Canada. September 13, 14, 15

**Northwest Mechanical Conference.** Hotel Duluth, Duluth, Minnesota. September 20, 21, 22

**American Photoengravers Association.** Netherland Plaza Hotel, Cincinnati. October 8, 9, 10

**Advertising Typographers Association of America.** Hotel Nacional, Havana. October 23, 24, 25, 26

**International Association of Electrotypers and Stereotypers.** Kenmore Hotel, Boston. October 23, 24, 25

**Printing Industry of America.** Hotel Statler, Boston. October 24, 25, 26, 27

**National Printing Equipment Association.** Statler Hotel, Boston. October 26

**New England Mechanical Conference.** Statler Hotel, Boston. November 3, 4

manner as a fresh-shaved chin and clean fingernails reflect the success of a salesman. If trimmed to size, correct margins are shown and a more accurate picture of the finished job is given the customer. Proofs should be sent flat and in proper sequence; it's exasperating to many harried business men to have to shuffle through a stack of proofs for the first page. This is a little thing, but the customer may be led to believe that if small details are neglected, other more important details will be slighted later.

#### **Be Familiar With Every Job**

The letterpress foreman, like the composing room foreman, must analyze each ticket and familiarize himself with every job. Careful records should be kept so that he, too, will know at all times where his jobs are. An adequate stock of inks should be on hand so that final, last-minute orders for more are not necessary. Care should be taken of every job and if errors materialize they should be ironed out immediately. (This applies to planning as well as to the letterpress room; many a helping hand can be lent without hurt to self. Workers in these departments, it must be remembered, are human and vulnerable to mistakes.)

When finished, the job should be checked out immediately and sent on to the next department. The foreman should never forget that time is valuable to others and that by seeing to all details in his room, he helps to keep the work flowing smoothly through the entire plant.

In hand litho—that department which gets plates ready for litho press—many jobs are made and broken, dependent on the skill and care of the workman. It might not be beneath the dignity for some strippers to take lessons from the compositors. Many a job, carefully planned and executed up to that point, is ruined when it gets to this department.

A couple of illustrations will prove my point: Most tabular matter is set on the Monotype to measures that usually equal an even number of set-ems (the variance is in the stub or first column). Why not determine the positions of the vertical lines, if they are scratched into the negative, with a set of these scales? It's a simple, less time-consuming, and certainly more accurate than a pica gauge or inch ruler. (Electrotypes making wax plates could take a lesson from this, too!)

If illustrations are to be stripped in, hairline rules should be inserted

in the forms by the compositor to define top and bottom extremes (the ends can be used to designate the widths) and the plates made to that size. The compositor, working with slugs, two and one-point leads, and cards of half-point thickness, can work to closer tolerances than the stripper working with a ruler. With competition the way it is today and with time at a premium, we should all do the best possible in the least time. This is one short-cut that gets results.

Like all before him, the litho pressroom foreman should study all tickets and learn the part he must play in the production of the jobs. By the time one comes to his department, many hours have been put into the job and it behooves him to not spoil it. Ink, color register (that unlicked bane of the pressroom!), paper stock, conditioning—all these should be the subject of special study. Offset lithography is a fast-developing craft; new methods are constantly being introduced and new ideas advanced. Short-cuts and the means of meeting competition are weapons of knowledge that pack a heavy wallop, especially when it comes to steady employment and pay rates that are above average.

#### **Take Good Care of Equipment**

Equipment should be kept in perfect working order at all times. When a press develops a clank it should not be forced to continue until that clank is ferreted out and removed. The life of the press is thus

prolonged and better production with less effort is obtained. These two words—"less effort"—make up an admonition that cannot be slighted.

Bindery is the last to get the job and is, therefore, the department that's most likely to be on the spot, especially as regards time. If time has previously been lost, production's fur is likely to be rubbed the wrong way by the customer and there's no alternative to tightening the screws. And in the bindery as much care must be taken as anywhere in the plant. Too much trim on one side, a wrong fold—these can, in the twinkling of an eye, ruin a fine job at the last moment.

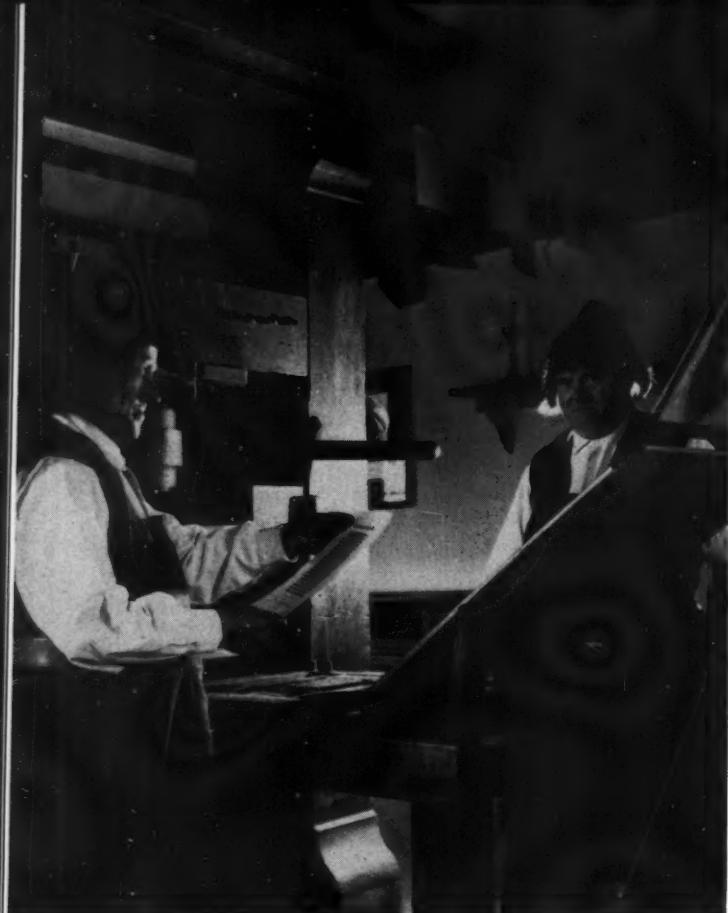
#### **All Must Work Together**

The bindery foreman should have complete mastery of his machinery at all times and should, if possible, be able to locate and correct troubles in record time. Folding and stitching machines are the prima donnas of the plant and can, at times, prove as cantankerous as army mules. Allowances should be made for such emergencies and all help extended to the men involved.

Let it be remembered that all departments should work together. If an error is made in one and detected in another, it should be taken care of, not in the spirit of catching someone making a mistake but in the spirit of extending help, of wanting to help make a better product and add to the reputation of the company for which all work.



Elected to run the NYEPA next season were, from left, Francis Ehrenberg and Frederick Haedrich, vice-presidents; William H. Walling, president; Mrs. F. W. Schaefer, treasurer; Peter Mallon, vice-president; Peter Forsman, secretary; and Don H. Taylor, who is the executive vice-president



# High Precision

By Eugene St. John

**Pressure without slur depends upon parallelism of printing surface and printed stock. Contact between paper and form is printing's prime element**

One of the oldest types of presses—the Gutenberg Press in the Gutenberg Museum in Mainz, Germany

Photo courtesy Foto-Laufer, Mainz

PRINTING, a stamping process, is essentially pressure without slur. In the oldest type of press, the platen, pressure without slur depends on parallelism of printed stock and printing surface. This contact between paper and form has been called the prime element of printing. On the platen press the entire form contacts the sheet at impression.

On cylinder presses successive lines around the cylinder's periphery contact corresponding lines on the plane surface of the form. These lines on the two surfaces must be parallel like the contacting surfaces on the platen press else there will be a slur (or slippage) which destroys the sharpness and clearness of the print. In addition, on flatbed cylinder presses, synchronization of speeds between printed sheet and form is necessary to retain parallelism of corresponding lines around the cylinder and over the form. On rotary presses the same conditions rule but in this type of press the lines around mating cylinders must be parallel and the speed of the mating cylinders synchronized.

Theoretically, printing contact on cylinder presses is a line, but in practice the line is broadened to a surface whose width varies with the pressure needed to impress the ink on the form onto the sheet according

to the levelness and smoothness or lack of these in the sheet.

Squeeze is a distortion of materials and should be held to the minimum, as in the "kiss" impression. If presses are checked and leveled and the units of forms held to very close limits, it is possible with minimum makeready to print with reasonable pressure. But if inaccuracies in press and form must be overcome by makeready there is often an excess of pressure used which results in slurs and wear. Most slurs are caused by one or more of the printing elements—form, press, and paper—being out of level in some respect, thus defeating parallelism and synchronization between sheet and form travel.

#### Forms Must Be Well Justified

In order to get a secure lockup the form should be well justified. Otherwise in getting it to lift, either the form or the chase or both may be sprung and so not be firmly seated on the bed of the press.

Warped and non-rectangular wood bases should be corrected or replaced. All plates must be firmly seated on either wood or metal base. Spongy wood bases with sinks or wells in them should be discarded and replaced. Make sure plates on wood are neither humped in the

middle like a camel nor dished like the old nag's back, and that they are well pinned down by the nails—not to the extent, however, that the central part of the plate is an arc.

When interlays or underlays are used they should be properly graduated in order that the plate may be firmly seated on metal base or wood mount that is equally firmly seated on the bed of the press. Firm seating of units of the form on the bed may be tested by thumping the unit with the ball of the hand.

Theoretically, all units of the form should be level within themselves and all of uniform type height because the press is engineered from this basis. In practice, large solid plates are underlaid above type height so that compression which occurs at impression because of the extra pressure from underlay and overlay on these large solid plates compensates for the "give" in wood base and packing from the extra squeeze at impression.

The foregoing precautions against slur would matter little unless the form and chase are properly secured on the bed of the press. After the form has been positioned quoins are unlocked to allow both the units of the form and the chase to seat firmly on the bed. While so unlocked the clamps are tightened just with the

# Presswork Result of Care

fingers to avoid bending the chase. Next the quoins are tightened just with the fingers and the form is planed. Then the quoins are gradually locked to maintain squareness of the form. Extremely tight lockup is not necessary and should be avoided to avoid springing form and chase. Wood furniture may be used between the clamps and the chase, and between the chase and the ink plate, unless there is considerable space when adjustable lockup bars will be found convenient.

When the quoins have been securely locked, the bed clamps are finally tightened, avoiding excess pressure that would spring lockup.

Needless to say, the bottom side of the form and chase and bed should be carefully examined to make sure they are clean before the chase is slid on to the bed.

## Properly Dressed Cylinder

Just as a level and type-high form is necessary as proper basis for printing, so a properly dressed cylinder is the proper basis for makeready. The sheets of the packing must be properly secured to the cylinder and the correct number of sheets used; each sheet must be level and smooth and all hangers and drawsheets must tightly and uniformly fit around the cylinder without a trace of buckle or wrinkle. Until these conditions are met it would be futile to start makeready because slur, wrinkles, and other troubles would surely be encountered. With a loose and baggy tympan slur may show all over the print, certainly in the margins. The pressman soon learns the importance of a properly dressed cylinder and becomes proficient and speedy in packing it.

At the start, the printing arc of the cylinder should be wiped as clean as possible. All sheets for the packing should be scored on the front end at a right angle to the sides. Scored sheets of special tympan paper for many makes of presses may be purchased ready for use. Otherwise tympan paper may be bought in cored rolls, fitted with cut-off blade, and hung from a bracket on the wall.

The press is turned so grippers are open, the shoofly fingers are

raised, and the cylinder clamps are opened. Paste is applied along the ledge in the opening of the cylinder where the clamps seat when locked.

Paste must be kept off the front edge of the printing arc of the cylinder. The so-called permanent packing goes on the cylinder first. In the old days pressboard or even manila cardboard was used for permanent packing with its drawsheet of muslin, which was damped when put on so that it might dry out tighter. Special manila tympan paper, either treated or plain, is used today for permanent packing because it is much better and more convenient. It is more uniform in thickness and may be reeled up tight as a drum head. The treated (oiled) variety is highly resistant to moisture and less compressible than pressboard.

How many sheets to be used in the permanent packing depends on the depth of the cylinder cut and the caliper of the tympan paper. Generally two hangers and a drawsheet are used, the drawsheet to be enough longer to wrap well around the reel rod and tapered for smooth wrapping around the rod.

The first hanger is smoothly attached to the previously pasted ledge of the cylinder opening. The corresponding surface of first hanger is pasted and second hanger smoothly attached above the first. The corresponding surface of the second hanger is pasted and the bottom drawsheet is attached above the second hanger. The clamps are now tightened and the shoofly fingers lowered. As the press is slowly turned the drawsheet and the hangers beneath are felt by the hand to

make sure there are no wrinkles and that all of the packing is smoothly hugging the cylinder. The tapered end of the bottom drawsheet is very carefully and snugly tucked in around the reel rod and it is then turned with the pin wrench until the drawsheet is smooth and taut. If inspection shows it to be properly smooth and taut, another tooth may be taken on the ratchet and locked.

The number of hanger sheets for makeready to be used in the packing above the permanent bottom drawsheet depends on the cut of the cylinder of the press in use and the thickness of the hanger sheets. The thickness of sheet to be printed also must be taken into consideration.

Generally top drawsheet (tympan) should be level with the cylinder bearers when the sheet to be printed calipers .004-inch. These four mils supply pressure needed to print, part of which is needed because of compression in form, packing, makeready patches, and stock being printed as well as any "give" in the press at impression.

## Packing Sheets Calipered

The various sheets of different papers used in the packing and the stock to be printed may be calipered with a micrometer and the packing built up accordingly. Generally the special tympan paper previously referred to is used in a thickness of .006-inch or .007-inch, and hanger sheets above the permanent drawsheet frequently consist of enameled book .004-inch or s. and s. c. book .003-inch thick. These three papers are used in other thicknesses for packing in some plants, and other kinds of paper may be used for packing. It is convenient, when practicable, to use hanger sheets of same thickness as stock to be printed so that taking off one hanger is just right when adding an overlay ground sheet of stock.

Atmospheric conditions change the caliper of sheets of paper as well as their dimensions and form. This must not be overlooked when calculating the number of sheets in the packing. Ordinarily a number of sheets are calipered and small pieces are stacked together alongside the cylinder bearer to ascertain the number of sheets required to bring

## A Billion Bucks

If a person had started in business in the year A.D. 1 with a billion dollars capital, and if he had managed his business so poorly that he would have lost \$1,000 each day, in this year of 1951 he still would have enough capital left out of his original billion to continue in business, losing \$1,000 a day, for almost an additional eight hundred years, or until the year 2739.—From *The Morton Messenger*

the packing even with the bearers. High relative humidity can increase the thickness of sheets of paper as much as 16 per cent. It is not unusual in very damp weather to find it necessary to change the top drawsheet in the morning after a damp night and even to reduce the packing a sheet in extreme cases. During such weather it may be necessary after packing the cylinder to lay a long straight edge across the opposite bearers to make sure the regular number of sheets in the packing have not swelled from moisture above the height of the bearers.

#### **Tympan Should Be Smooth**

The five or six sheets generally used for hangers are attached after pasting just like the hangers in the permanent packing. The top drawsheet (tympan) is finally put on in the same painstaking way as the bottom drawsheet. The part of the complete packing next to the gripper edge is carefully examined at this point. It must be smooth and even without the slightest lump to avoid slur and wrinkles. The care used to pack the cylinder is equally important with a level and type-high form in maintaining parallelism and synchronized speed of the two traveling surfaces, the arc of the packed cylinder and the plane form which meet at impression.

These necessary conditions must be kept in mind during makeready, and underlays, interlays, and overlays properly gradated to keep high and low spots in form surface and tympan at the minimum.

The cylinder should be set low enough to ride the bed bearers at speed on impression. New presses generally have cylinder set to ride bearers on a light form and it is then lowered for heavy form after "running in." The register rack and segment must be correctly set to avoid slur as well as misregister.

While some cylinder presses are more vulnerable to slur caused by improper air cushion than others, the air adjustment should be suitable in order to avoid unnecessary noise and wear of the press.

Oil and other matter on the bearers may cause slur in margins. The bearers should be kept clean.

Worn bearers cause slurs and should be replaced with new ones. Some cylinder presses have had bed bearers so badly worn in a spot or spots that mortise was caused for a corresponding tenon on the cylinder bearer a pica or more higher than the adjacent surface of the bearer.

Improperly adjusted intermediate gear can cause slur by affecting the synchronized travel of the bed and cylinder.

Another possible cause of slur is form too large or too near front edge of bed, and printing after bed slows for reverse.

Slur and wrinkles at the gripper edge of the sheet stem from the sheet not lying flat on the packing or taken by the grippers with a bite not uniformly firm. Make sure there is no residue of previous makeready such as paper and paste under the grippers. The feedboard must be at the proper height relative to the cylinder. The guide tongues should clear the drawsheet the thickness of a sheet of paper more than the stock to be printed. The grippers should not be set so close to guide tongues or shooflies as to cause a slight buckle in the edge of the sheet. The guides should not raise the front edge of sheet and shooflies should be carefully adjusted for proper lift. If the slur is at the front guides, raising the end grippers a trifle will allow the front edge of sheet to level.

One function of the brush is to iron out the sheet when snugly in contact with it but not too tight. The brush should be a bit closer to the drawsheet in the center than on the ends, with pressure tapering off toward the ends. The bands should be set in the same manner without dragging on the sheet.

Slur at the margins and the rear end of the sheet may be caused by a form or its units being over or under type-high with the cylinder under or over packed correspondingly. The corrective is to make the form type-high, set the cylinder to ride the bearers on impression, and properly pack the cylinder.

#### **Stiff Stock May Cause Slurs**

Slur at the extreme rear end of sheet may be caused by stiff stock wiping the form as it leaves it. Tacks with their heads under type-high to avoid inking may be driven in the furniture to hold up the edge of the sheet. Or furniture of suitable dimension when turned on edge may be used in the same way. Or if waste in stock permits a slight trim, a rule parallel to the rear edge of sheet may be locked in form to print near the rear edge of sheet and be trimmed off in the bindery. When none of these makeshifts are practicable, if margins permit, a tape or string of strong twine may be carried around the cylinder to hold the sheet down in the margins.

Slur in units of the form, such as plates on wood base, is caused most often by plate not being firmly seated on wood base and the wood base not being firmly seated on the bed of the press, or by warped mounts or warped wood furniture, or by clamps being too tight.

Slur on the front edge of sheet may occur if the sheet is wavy on the edge so that it slaps against the form before the latter starts on impression. The wave may be in the front edge of the sheet when it is leaving the pile of the automatic feeder. Relief from this trouble has been found in some offset-lith plants by allowing radiant heat from an infrared heater to impinge on the edge of the sheet as it comes off the feeder pile and thus drive out the moisture and allow the wavy edge to level.

#### **Controlled Atmosphere Best**

Air conditioning and paper seasoning machines best control atmospheric problems. The best makeshift substitution appears to be a uniform temperature in paper storeroom and pressroom of around 70 to 75° F. When paper is very cold it may be allowed to warm in the container, otherwise it may be stacked in convenient piles with smooth edges and with a smooth board between every few reams. When wavy sheets must be printed, cardboard strips are pasted in the margins on the top drawsheet to cope with the waves or a buckle in the sheet. For short runs which must be made, the stock may be hand-fed by rolling or breaking the lifts, securing a cutter stick across register fingers and by feeding over a hump.

Rollers are frequently said to cause slurs but blemish is more of a wipe. Waterlogged rollers should be seasoned by exposing cautiously to dry heat. Hard rollers and rollers out-of-round should be replaced. The form should pass last under the best one of a set of faulty form rollers if such must be used in an emergency.

If good rollers are set too low, they will jump as the form goes under them and leave a streak when they come down. Rollers out of contact with vibrator, especially the last roller, will cause a wiped streak on the form.

Ink sometimes is said to slur but this is generally too much ink squashing out from the edges of type and plates. The corrective may be a better ink of stronger color, a heavier (stiffer) ink, or merely a shorter ink, and less of either used.

# Reducing Fine-Line Drawings Blurs Details

★ UNLESS CARE is taken in the preparation of line plates, printing results are often unsatisfactory. When line plates are engraved on zinc, as is ordinarily done, the fine dots and lines have a tendency to undercut and flatten out under the pressure necessary for good printing.

In the larger plate, shown below on right, reproduction was made on a copper plate and was carefully re-etched. By this means it was possible to hold the fine lines shown.

This plate is a same-size reproduction. Below it are shown a half-

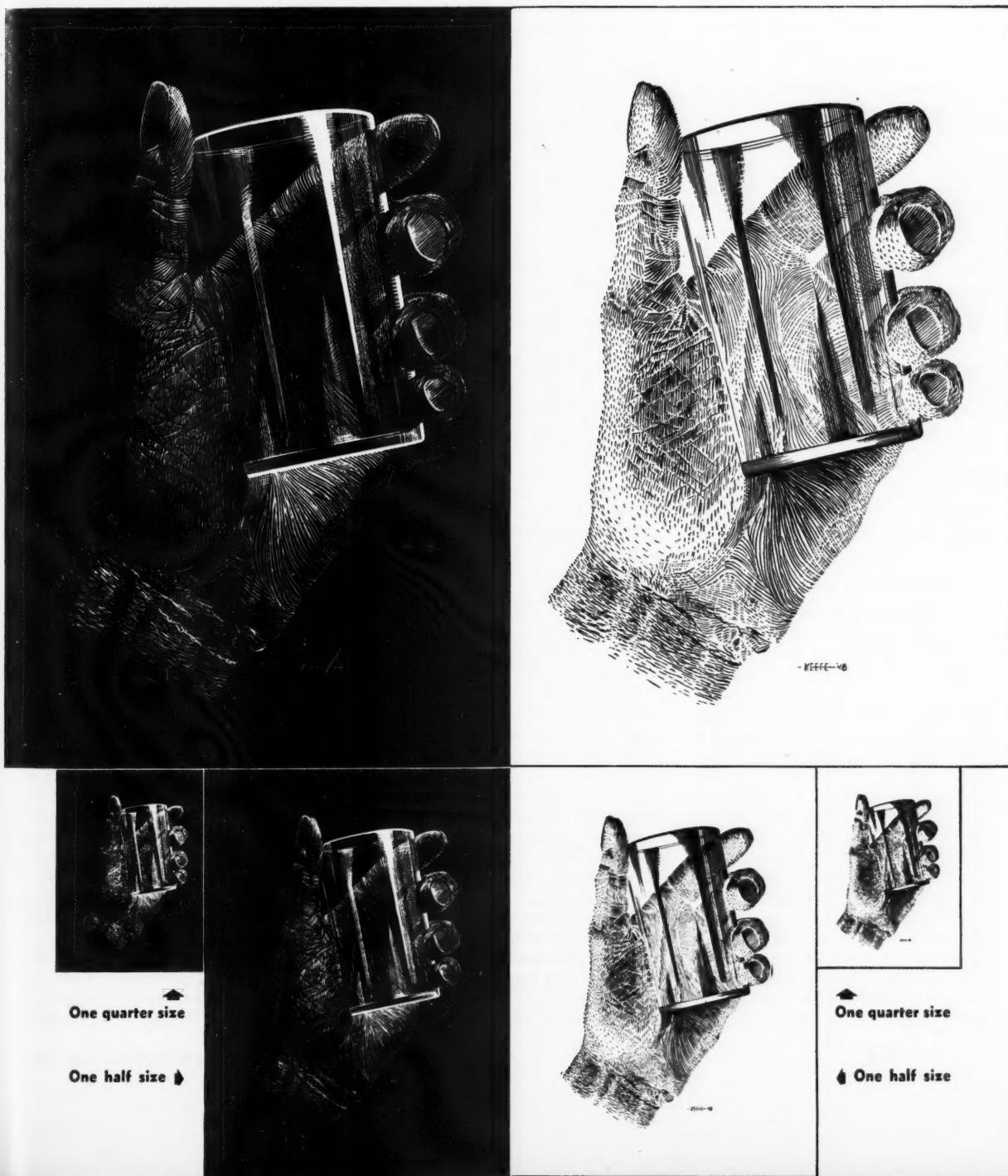
size reduction and a quarter-size plate made from the same original. In these two, especially in the quarter-size it is possible to see under a glass that many of the fine lines have disappeared, in spite of the fact that these plates were on copper.

The reverse plates on the left were also made on copper, being made from a scratch board drawing. Because they were deep-etched, the white lines were held in the reproduction. On the smaller plates, a good glass will show that the black masses have run together.

From an engraver's examination of these plates we get the following recommendations:

1. Do not reduce the cut below same size if the original contains any fine pen lines.
2. Preferably have the artist trace the lines heavier than normal on all originals.
3. If very fine lines must be reproduced, have plate made on copper and have it re-etched.

(Illustration is used through the courtesy of The New York-Phoenix Art Journal.)



# Pointers on Collections

COLLECTION OF outstanding accounts should not be too serious a problem if the small printer systematizes collections and gives the matter the attention it deserves. Usually, where a disproportionate number of accounts are overdue it is because of one or more of the following causes: the granting of credit to poor risks; failure to define terms of payment; haphazard collection efforts.

Timely collection of accounts is the keystone supporting a sound and profitable credit business. Weaken the keystone and the business may crash around the owner's head. It cannot be emphasized too strongly that there is a collection law of diminishing returns on outstanding accounts. The older an account becomes, the less the likelihood is that it will be collected in full—ever.

Not a few smaller printers set their creaking collection machinery in motion only when they themselves are being pressed for payment by suppliers. That is, they arouse themselves to collect delinquent accounts only when and to the extent their own debts and personal needs make such action imperative. This is reducing collections to the level of a rat race in which it is a toss-up whether the printer will win or lose in his struggle to obtain funds to pacify his creditors. In his desperation to get ready cash fast, the harassed shop owner may be tempted to crowd good accounts when he fails to collect from delinquent accounts.

## Be Cautious With Credit

At least half of the difficulty of collections can be eliminated at the time the printer extends credit. If, at this time, he fails to lay the basis for easier collections he has only himself to blame. The trouble is that the smaller printer cannot afford a credit man but in his own person must combine multiple tasks including credit handling. The result is that the bedeviled printer, in his function as salesman, frequently overrules his best credit judgment.

In extending credit, the printer should always keep uppermost in his mind the fact he is extending to the customer a *loan* in the exact amount of any purchase placed on the books.

In the case of a new customer, the printer should satisfy himself by questioning, and by outside inquiry

By HAROLD J. ASHE

among other business men or a credit association, that the customer is financially able to honor the indebtedness. Many a risk has been taken for no better reason than a doleful glance at idle presses. It is not enough to find that a customer is able to pay his bills. The question is: *will he pay?* Being able to pay and being willing to pay are not always identical conditions.

The size of a customer's business, or the amount of printing he can use, is not always a safe criterion of his willingness to pay without prodding. One customer modestly netting just a fair living for himself may pay off fast. Another customer, apparently in the chips, may drag his heels. The latter may be overextended and be living beyond his means through failure to pay his bills. Or he may be trying to pyramid his business by stalling creditors while using their money.

## Make Your Terms Clear

Printers should be especially alert to "creepers." "Creeper" fall into two categories. The one is perfectly honest in his intentions, but he will keep increasing his balance until the printer calls a halt. He'll make payments on account every month without fail, but the balance always climbs. The other species of "creeper" is essentially a confidence man at heart. He literally keeps "creeping" up with his unpaid balance as long as his printer, and other creditors, permit him. Then "creeper" goes into bankruptcy after having "mined" his business for all it and his creditors will stand.

Likewise, there are customers who are honest—up to a point. Some years ago, one business man being asked by another whether a certain customer was honest, replied: "Yes, Doe is absolutely honest—up to \$50." Beyond this figure, the business man explained, the customer found a debt burdensome to the point where collection was difficult, even piecemeal.

At the time credit is granted there should be a clear and unmistakable understanding by both the customer and the printer as to the exact time of each payment and the exact amount. Once the terms and

conditions are agreed upon, the customer should not be led to believe that he may readjust the terms to suit his convenience or whim. The shop owner must not approach this consideration with a casual or careless attitude, else he will convey his seeming indifference to customer.

## Some Fundamental Rules

Here are some fundamental collection rules, attitudes, and practices that may prove helpful in establishing a firmer control on outstanding accounts:

1. When an account is due, the printer should be forceful (yet polite) in insisting on payment; otherwise he lays the basis for later trouble.

2. He should not apologize in asking for money. It is the printer's money—not the customer's.

3. He should not explain why he needs the money, such as overdue bills of his own that must be met. This is psychologically wrong. It will not get the sympathetic response hoped for; it may very well prompt the customer to stall. Begging and entreaty hint at weakness.

4. Bulldozing a customer, even a delinquent one, is usually bad technique, even though the printer may feel he has been provoked to that point.

5. The printer should make it a fixed policy to send out statements regularly on the same date each month, preferably on the first. Haphazard billing will serve only to educate accounts in the belief the shop does not expect prompt payment. Most small accounts rely on monthly statements as reminders. These are accumulated and all outstanding bills are paid on the basis of statements at hand. If the printer's bill is not among them, he will likely be bypassed in favor of other creditors.

6. Don't follow up statements too fast on sound accounts. Other businesses count on their own first-of-the-month billings to bring in funds with which to pay their bills, including what they owe their printers.

7. Don't write off a debt as bad except as a last resort. Bad debts come off of net profits entirely.

8. Attempt to distinguish between dead-beats and delinquent accounts of those having temporary financial reverses. Don't baby the former;

don't be ruthless with the latter, because they may be turned into sound accounts again.

9. If an account starts going sour, attempt to find out why. If the customer's circumstances have changed it may suggest an intelligent course of action looking toward collection, possibly adjusting payments to keep them coming in at all. If the printer doggedly insists on a lump payment, where reverses have occurred, his insistence may result in no payment. Token payments can keep the account alive. But facts must be had. The printer should guard against accepting idle gossip about a customer as fact, especially if it involves a question of the customer's credit standing. Much gossip in the business world is deliberately malicious and designed to injure. It can often hurt both the customer at whom it is directed and the printer who unwisely listens and acts on it. Test rumor for its truth.

10. The shop owner, however, should not turn a deaf ear to bits of information that come his way. By winnowing this intelligence, he may uncover certain kernels of fact that can be invaluable in collecting delinquent accounts, and in guiding him in extending credit.

Here are just a few of the questions that may arise in considering the collection problem presented by a delinquent account, or in granting of credit to an applicant. Are certain bad character traits becoming more pronounced? Is an occasional tippler sinking into the slough of compulsive drinking? Is a divorce looming with probable expensive alimony payments in prospect, or a heavy cash settlement that will burden the debtor's business? Is the customer living beyond his means and postponing bills to do so? Is he gambling heavily? Is he speculating to the neglect of his business? Any of these may be considered a danger signal.

#### **Send Bills Promptly**

Particularly in smaller communities, where the printer has an opportunity to observe his customers, odds and ends of information can frequently save him from loss. He should always test this knowledge in terms of credit risk — not on the basis of personal likes or dislikes. Some of the most disagreeable people are scrupulous in paying bills, and some of the most engaging personalities are dead-beats at heart.

11. When payment is received the owner should post the amount immediately, showing the new balance.

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This will ensure that when statements are mailed out the new balance will be reflected. Nothing can be quite so annoying to a customer as to receive a statement on, say, the second of the month that does not indicate payment on account as late as the twenty-fifth or thirtieth of the previous month: Some customers may even take this oversight as a sly attempt by the printer to withhold crediting the account and, generally, can create ill-will.

12. To help avoid credit oversights on statements, they should be made and mailed the same day. Making statements in odd moments during the last week before mailing will inevitably result in some statements not being up to date.

#### **The Bouncing Check**

13. A promissory note may be worth trying for in settlement of an old account. Once a note has been given, the debtor will be unable to contest the bill as he might with a book account, or claim that printing was defective. However, the printer should be warned not to accept a note calling for more than the legal rate of interest. The customer him-

self, in a seemingly generous frame of mind, may offer an interest rate higher than the legal rate, knowing this makes a note unenforceable.

14. If the shop owner has reason to believe a customer's check will bounce, particularly where it is given reluctantly, he should cash it, if possible, at the bank on which it is drawn. If the printer's own bank balance is low and he draws against the bad check, his own checks may bounce. This can injure his standing with his own creditors, as well as with his bank. If it is not possible to cash the check, he should deposit it but not draw on the strength of such a deposited check until sufficient time has elapsed for the check to clear—or bounce right back.

#### **Legal Action Last Resort**

15. Exercise care in turning over bad accounts to an attorney for collection or assigning them to a collection agency. Generally, such action is warranted in the case of proved dead-beats or those who are completely impervious to other collection approaches.

16. If the printer brings suit he should do so only if there is a reasonable prospect of enforcing judgment after it is obtained. Otherwise, he only adds collection and legal costs to a bad debt for an additional loss. However, some debtors may have future prospects justifying a judgment, provided the bill is substantial. This judgment can be renewed periodically at nominal cost until the defendant acquires assets to justify attachment.

17. Once court action is started, the printer or his agent should follow through. He should not hesitate to attach the debtor's assets of whatever nature or wherever found.

18. While not directly a part of collection technique, the printer may find it smart to send each customer a brief note of thanks when a bill is paid up. This will make a favorable impression and when the customers again use their credit with the printer they will be even more disposed to keep the printer's high opinion by paying promptly.

While no printer extending credit will ever be able to devise methods that will eliminate all credit losses, he can certainly adopt credit-granting attitudes and collection techniques and policies which can sharply reduce his losses through the years yet remaining to him in business. To the extent, dollar-wise, that he stops these losses, to exactly that extent does he increase his net profits.

## **Make that Letter Print**

After the form is locked up and on the small jobber ready to go, it's discouraging, especially on particular work, to find a letter or two which will not print clearly as the other letters are doing. Rather than remove the whole form to substitute or raise the type, it is sometimes possible to make the letter print satisfactorily by jagging the tympan wherever the letter strikes. With a make-up knife, stick the tympan slantwise several times along the length of the letter. This in effect raises the tympan and causes the letter to print.

By Stanton R. Gaylord



# Would Your Plant Benefit By Adding Art Department? Advantages Outlined Here

By P. R. Russell

• IN EVERY large plant and in many of medium size, there is an art department or at least an artist as a part of the permanent staff. In every plant doing any amount of offset printing, an artist is considered a must, but there are still many employing printers who have not yet seen the necessity for employing one. It is possible to have an artist on your payroll and not be aware of it.

Somebody is being paid to do art work. Perhaps it is a free-lance artist who can be called in when he is needed and who will do a certain job for a certain price. If he (or she) is capable of good work, the price is all the traffic will bear. The printer has no choice but to pay. Other printers send their rough sketches or ideas along to the photoengraver or to the trade offset platemaker and his artist does the work—for a price, and usually a stiff one.

This practice may go on indefinitely, but perhaps you may, as one employing printer did, do a little checking on what your art is costing you the way you have been getting it. It is easy to check invoices of what you have paid free-lancers, photoengravers, and platemakers and find out what this has cost you. You may have paid out the equivalent of a salary for a year for a full-time artist, or one-half his salary. In any case you have actually had only a fraction of his time. One such check showed that the price of a full-time artist was actually being paid out but that all his work represented less than one-fourth of his full time. A competent artist was employed for the amount involved and came into the plant to give four times as much effort to the work.

Enough from that particular angle. Other work, besides the creation of art for jobs that require it, can be done by an artist on your payroll and actually working in your plant. Any trained commercial artist will know how to do all kinds of type layout work. The average plant is woefully weak in this department and skilled help is needed. Give the artist as much of this as he has time to do. If you already have someone doing layout work regularly, move that person alongside the artist and co-ordinate or combine their work. In time, if necessary, hire an assistant to the artist (a trained commercial art school graduate) and turn the whole job over to them.

#### Will Improve Quality

A competent artist will improve the appearance and quality of any piece of work that he has anything to do with. This means greater customer satisfaction. Good art and layout work is your ace-in-the-hole in meeting competition. If a customer is impressed by an artist's presentation (even in the rough) of a proposed piece of work, he is almost certain to overlook a higher price. A survey in a certain city of many printers revealed that only about one-fourth of all commercial printing was being bought from the low bidder on price alone. Such things as good salesmanship and good presentation of the proposed work were more often the deciding factor.

It is a determined fact, too, that the better the layout to work from, the less the actual cost of getting a job into type and presenting a proof of it that will satisfy the customer. Such a reduction in cost can be applied on the added cost of an art department.

Adding an artist is adding a valuable unit to the supervisory as well

as to the promotional staff of the plant. He is a technically trained man and can be just as valuable to you as you will let him be. Not only respect him yourself, but see that all your employees in the office and in the shop respect him. In at least one printshop, the legend, "Art Department," on an office door did something for the whole place, especially the "boss." He began shaving every day, instead of twice a week, out of respect to the new "class" of his establishment.

#### Help Select Material

A trained commercial artist is invaluable in selecting and preparing photos and other material for making halftones and zincs, as well as doing the paste-up and layout work for offset plate copy. This is particularly true where there are to be combinations, reverses, and so on. He will also know how to designate the most effective screen in halftones for a given kind of paper. These are very important factors in producing any job satisfactorily.

There is hardly a problem in the production of either letterpress or offset printing that an artist cannot help solve in any plant. He can give excellent advice on color presswork. The customer usually depends on the printer to work out for him the most effective color or color combination for his job. If the finished job does not look right, the customer (who couldn't select a color or colors in the first place) is going to shout to high heaven about it. You can certainly use the judgment and training of an artist in producing what will please the customer and the public. A small town printer confessed that he spent a great deal of his time dodging dissatisfied customers, turning corners quickly and even hiding in doorways to avoid meeting them. Some of the "big boys" have frequently had good reason for dodging and hiding.

An artist knows proportions. That is a mighty good thing to know around a printing plant, whether it is the trim size of a booklet or the

actual type size of a page. It is impossible to say which is the more distasteful, improper proportions or a monotonous sameness about what you do. Imaginative ideas are part of the artist's equipment.

#### **Let Him in on Planning**

Examine any exhibit of good advertising printing and note the variety in trim sizes as well as stock and treatment of the contents as a whole. Look through any magazine rack and see how the magazines vary in size. A change in trim size alone may add a great deal to a catalog or to a promotional folder or booklet. Let the artist in on the original planning of jobs and make use of his judgment and skill in determining the size of the page and the size of the type form printed on it.

This leads to one of the printer's biggest headaches—the correct determinations of margins, the right

positioning of the type page on the paper. Here is work for the artist. Let him calculate the margins and designate them on the instruction sheet. Then let him see a press sheet and check to see if his instructions are carried out. Some otherwise excellent pieces of work have been spoiled by incorrect margins. If you don't believe you need his help in this, test your own knowledge of margins, try your proofreaders, your shop foreman, anybody, but be sure to quit before you start pulling your hair out.

Think of the long-established and successful printing firms in your city and consider the fact that with very many of them, at least one of the original sources of success in the business was a commercial artist who contributed his skill and knowledge from the beginning. The artist is essential and should be on your payroll.

## **A Good-Will Builder**

One of the best good-will mediums our newspaper ever had was its free distribution of scratch pads. About every ten or fifteen sheets within each pad we inserted a little printed cartoon or ditty boosting our newspaper as an advertising medium or praising the quality of our job work. We had to solicit most of the advertising, so in the course of his prowling, the ad man carried with him a supply of scratch pads with which he supplied the needs of the business men upon whom he called. They certainly appreciated them.

Even the most shortsighted of our advertisers were able to feel the benefits of advertising with us, for most of them allowed themselves to become dependent upon us for their supply and in this respect, at least, "would not have known what to do without us."—*Stanton R. Gaylord*

## **Careful makeready pays off**

We should say something about makeready once in a while. I know that pressmen want to know how things are progressing along that line. To be frank with you I must say this: As long as you have the flat-bed cylinder press you will always need some makeready of some kind. Much depends on the style of make-up and material in that form to be printed. We should also take into consideration the paper and ink and the age of the press and what is in that form.

There are plenty of jobs coming and going through the plant that require only a few patches of tissue or folio. Then along comes something out of this world that will take more than 15 minutes to get started. About everything that is used for printing is locked up and ready for the press—about sixteen pages, 8 by 11, sheet 32 by 44. Should you take, let's say, from six to twelve hours for makeready on that sort of stuff, they get worried about this out there in front and no fault of yours, either. It just so happens like this.

Let's cut this up into two forms, 16 by 22, for that small press and try and cut down on that makeready time and also the running time. On that large press we average 1500 per hour and on the small press 3000 per hour. Makeready time on the large press, let's say, six hours and on the small press, three hours, so we do not gain anything here or lose anything. About all there is to this is that we have more to look after on that large press and on that small

By Joseph Kovec

press you have plenty to worry about due to the speed. Let's remember this: A mixed form consists of a lot of material of different heights and this applies to some type matter, too.

So now, Mr. Pressman will compensate for all of that stuff that is not there and bring to that printing surface so that it will look like something that is easy on the eyes. There could be some vignette cuts and some that print in several colors, so a very good makeready is very essential as register will be involved here. So you see it should take some extra time right there. There are some jobs of the same size sheets and a few plates in the form that will not require all of that time in makeready. Perhaps you can cut the time in half—just slap it on and throw one overlay on and there you are. Why not one overlay on that mixed form? You would say that you will try it sometime. You want to see that job and also how many on the run, and you want that last sheet and also one of the first impression. Let's compare them.

This all applies to the soft linotype and that monotype metal, not electroplates. We usually find a difference in the face of this kind of material at the end of a long run. A good makeready will help eliminate a lot of this. If you are not fussy and the customer wants it that way, then go ahead and slap it on. Nobody gives a hoot. So

now what have you got to say for yourself? Well, the question is makeready and less time.

To tell you the truth about this makeready business, we are progressing plenty but it all comes out in the beginning—a good start and good material. Men on the job who know their stuff and have the tools to work with; good clean place to work in, presses and all of the other things that go to make life a pleasant dream. Yes, I have worked in places of that sort and right now we have a very modern up-to-date plant where I am employed—good men all around the place and everything under the sun to work with. We should mention this, that all of the premakeready that can be done will help a lot—a possible 50 per cent reduction in makeready time if you know when and where to begin.

Just where would you start on this premakeready? It would be wise to check on that printing press, rollers, ink, paper, good lubrication, have all delivery in order, jogger needs attention; see that all cuts are the proper height and plenty of nails in each. If this is to be a mixed form, have all of that stock in the pressroom and press good and clean (all of that dust cleaned up from the last job). Those brushes collect a lot of dirt and can hold just so much. All of this takes time and can be taken care of before you lay that form on that press. Don't forget to get a good packing on and those guides set for sheet size and position.



Walter L. Coburn examines classified telephone directory bearing his firm's advertising

## Sterling Attributes Rapid Growth To Telephone Book Advertising

★ BUSINESS PROMOTION for medium and small-sized printers presents a problem not always easy to solve.

That's what Walter L. Coburn, president, Sterling Printing Corporation, Chicago, told THE INLAND PRINTER. Coburn became Sterling's president in 1941, and since that time the firm's business has been increasing *every* year by 10 to 20 per cent.

After thirty years Sterling is, according to its slogan, "big enough for the big jobs, small enough for the small ones." Sterling produces fine letterpress and photo-offset printing in full color and black and white. Pressroom equipment consists of large and small units, entirely automatic. In addition, a complete modern bindery is maintained, with folding and stitching machines, multiple head drills and die-cutting presses.

"In our business we have nothing to sell to the general public," Coburn said. "Thus the common media of advertising which are so effective in most industries are not for us.

"We like to feel that our business has grown because of the things our customers say about us. Actually, recommendations of satisfied customers have played an important part in our continued growth.

"There are, however, other business promotional methods which we use profitably and which are available to all printers regardless of location. They are buyers' guides and directories, and printed advertising mailed directly to prospective and desirable accounts.

"In our city two directories are open to us. We use them extensively, with excellent results. The Chicago classified telephone directory is one; the other is the Buyers' Guide of the Association of Commerce.

"We have used the classified telephone book heavily for ten years and at the moment appear in half a dozen places. Under the heading, 'Printers,' we now have a half-inch ad which not only mentions some aspects of our service, but also refers to our quarter-page advertisement at the beginning of the 'Print-

ers' section of the book. We also have another listing which reads 'Sterling Press.' In the next book, this half-inch space will be increased to an inch, 'Sterling Press' will be set in boldface type, and certain improvements in arrangement will be effected.

"Under 'Planographers' we have a bold type listing. Under 'Lithographers' we have a similar listing.

"It goes without saying that we would not continue to use the number and variety of insertions we do if they did not bring us the desired results. We have traced leads to each of them—some of the leads turning into very fine business indeed. The most important of the listings are, as one would expect, those under 'Printers.' And the most important there is the quarter-page advertisement.

"I have no interest in building the business of the telephone directory people, but I will say that a quarter-page ad is not merely twice as valuable as an eighth of a page—it seemingly brings a plus measure of return. Undoubtedly a still larger space would be even better, but the quarter-page is the maximum permitted in the Chicago book.

"A number of advertising men and volume printing buyers, whose judgment is recognized, have told me that the fourth-page ad is a good one, and the directory publishers informed me about a year ago that it was one of the best single ads in the book.

"At any rate, we spent a great deal of time and thought on it. I urge other printers to give equal thought to their ads. I have had prospective customers tell me that they were impressed with our advertisement, feeling that such a printer would give equal thought and consideration to their own requirements in the way of printing.

"We very definitely attribute a share of our healthy growth to consistent use of telephone directory advertising. We also attribute part of it to the Buyers' Guide, mentioned before. If a printer is fortunate enough to be in a city where such a directory is published, I recommend that he use it.

"Another factor in sales promotion to which we have given considerable thought is the selection and training of salesmen. Perhaps my own background in sales and advertising has helped me here.

"Some printing salesmen are salesmen only and know very little about printing. Often they are easily confused when an informed buyer

asks a simple question about, say, the capacities of various presses. On the other hand, there are too many salesmen who have grown up in the shop and know all about printing but little about salesmanship.

"Obviously the man who combines both virtues represents the ideal, but the trouble is, you can't find him. You must train him. If he has been a salesman, you have to teach him printing before sending him out; if he has been a printer, you must teach him salesmanship."

"I recognize that this is not easy to do. Many owners of printing concerns are themselves printers by trade and have prospered because they are good printers and honest business men. But many of them don't know what to look for in a salesman, and could profit themselves by learning a little more of the art of salesmanship."

"Now a final word about my pet peeve—pricing. Too many printers are too concerned with getting an order and not enough concerned

with turning out a finished product which will do a good job for the customer. Apparently they work on the theory that the customer isn't willing to pay the cost of a really good job. So they try to guess what he would be willing to spend, what their competitors will bid, then reduce quality sufficiently to get under that figure.

"Printers should set the standards of quality for the customer. They should show him how to do a job better which, though costing more, will bring him greater results."

"The printer who takes an order on price alone just gets an order. The printer who interprets the specifications on a quality-for-result basis serves his customer well."

"He not only secures the initial order, but takes the first step toward building an account which will assure him of additional orders to come. He will be rewarded for the *plus* in time and thought he devoted to that first order and for the courage it took to sell it."

## Current Problems Engage Educators

- A REALISTIC program to keep the graphic arts education keyed to the needs of emergency defense training as well as a long-range program of education for the printing industry were worked out during the Twenty-sixth Annual Conference on Graphic Arts Education, held in Cleveland, from June 17 through June 20.

Robert H. Caffee, president of William G. Johnston Company, of Pittsburgh, and of Printing Industry of America, Incorporated, spoke on "Stockpiling Skill and Leadership for the Future." Mr. Caffee censured the printing industry as a whole for its failure to support the education efforts during the past fifteen or sixteen years. "This tragic situation is now being met by the decision to set up the new Council on Graphic Arts Education," he stated, adding that the Council will begin to function within the next four months.

There were three evening sessions, beginning with an impressive "Hour of Worship and Memorial Service" in which president George J. Bilsey, past presidents C. Harold Lauck and Ferdy J. Tagle, and educational director Fred J. Hartman participated.

The annual banquet furnished the setting for the presentation of the three first place awards in the 1951 IPI essay contest by George Welp, International Printing Ink Division of the Interchemical Corporation, New York.

Among the speakers and discussion leaders of the four day sessions devoted to emergency training and long-range education were: Loren H. Carter, Lakeside Press, Chicago, Illinois; Patrick F. Boughal, New York School of Printing; Byron G. Culver, Rochester Institute of Technology; and Allan Robinson, Mergenthaler Vocational High School of Printing.

George J. Bilsey, of East High School, Cleveland, was re-elected president for the 1951-52 school year. All other officers were also re-elected and two regional vice-presidents added: John G. Edelmann, of Southern High School, Baltimore; and R. L. Harper, University of Colorado, at Boulder. Four invitations were received for the twenty-seventh annual conference from Toronto, Madison, Boulder, and Boston.

**Advertising-Direct Mail**

**STERLING PRNTG CORP** 325 W Ohio-SU prior 7-3277

**STERLING PRNTG CORP**  
Printing-Typesetting-Binding-Engraving  
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**STERLING PRINTING CORP**  
325 W Ohio-----SU prior 7-3277

**STERLING**

*Complete  
Printing  
Service*

**PHONE**  
**SU**perior 7-  
**3277**

**LARGE** Enough to handle your Catalogs, Booklets, Broadsides, Circulars, Manuals, Publications, Box Wraps.

**SMALL** Enough to handle your office forms, Self Mailers, Folders, Mailing Cards and Letterheads.

**COLOR PRINTERS**

- OFFSET-LITHO
- LETTERPRESS
- PLANOGRAPH
- LAYOUT
- DESIGN
- ART WORK

Expert Color Printers  
Advertising and Direct Mail for over 30 Years

**STERLING PRINTING CORPORATION**  
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Sterling uses quarter page in classified phone book. Included above are small entries

# Five Danger Spots in Estimating

By Morton J. Browning

• WHEN THE ESTIMATE of the cost of a commercial printing job goes wrong, causing the printer to lose money, at what point is it most likely to be off? Where are the danger spots in estimating printing?

An estimator with nearly twenty years of experience would post warning signs at at least five points along the way in a detail cost estimate, based on standards or any other reliable production unit figures. Here they are:

1. There is always danger of losing money in estimating composition and make-up and proofreading without seeing the copy. This is true whether the job be anything from a visiting card to a newspaper-page size broadside. You need to see the customer's final copy and be able to determine the number of ems of machine-set copy and the number of handset lines, *et cetera*. Anything short of this is a gamble in estimating. Artist's pencil sketches and advertising agency copy outlines are deceptive. Better find out too if the customer will allow your proofreaders to edit and "style" the copy according to your rules. Otherwise you may have trouble.

The amount of proofreading required by commercial work varies. You can be safe in figuring proofreading only by seeing and carefully examining the copy. This will give an opportunity to determine if you have mats for accents or other unusual character mats called for in the copy. The writer recently estimated a booklet job to be printed in Portuguese. The person preparing the copy was required to submit a complete list of all accents required before the estimate was made. This list was cleared with the machine composition department.

## Margins and Bleeds Troublesome

2. Margins and bleeds, as related to type page measurements and to press-sheet size, are next in order of troublesomeness in estimating. Mistakes made here can cost a lot of money. The writer recently set about estimating a job for a sheet 17½ by 22½ inches on a Style C Kelly only to discover that two or more of the eight pages involved called for bleeds, affecting margins and requiring

ing a spread in the lock-up. It was necessary to increase the sheet size to 19 by 25 inches, shifting to a larger press, at approximately 15 per cent increased cost in presswork and about the same in paper stock. It would have been a bad day for plant profits if the necessity for that shift had been overlooked. You can't print without "gripper" margin and you can't stretch a sheet of paper.

## Presswork Estimating Dangers

3. The danger spots in estimating presswork are legion. One of the greatest is in figuring on stock of a quality and finish that will not do the job, only to have to use a better quality and higher priced paper or suffer the extreme penalty of having the customer refuse to accept the finished work. Few customers will accept the blame for entering an order for a job calling for material that will not prove acceptable in the complete stage. It is a foolish mistake on a printer's part to attempt to go through with a job using material that he knows is unsatisfactory. Better assume from the beginning the printer's responsibility for selecting the material and the process for the job.

There is at least one commercial printer who has always refused to do any job with halftones in it on anything but a coated sheet. He is equally insistent on not printing a letterhead on any bond below a 25 per cent rag content. Instead of going bankrupt for lack of work in the face of not-so-particular competition, he has gained such a reputation for quality that he can get all the work he is able to do even at a higher price than his competitors.

Many commercial printers will insist that the additional labor cost of getting satisfactory results on a sub-standard paper is greater than the additional cost of a higher grade of paper.

3. There is always great danger of underestimating press makeready where halftones or process color plates, or both, are involved. In our plant we add .45 hours per page for each page with a halftone on it, or .2 hours for each page with a line cut on it. For color work we add one-half of a normal makeready for

a "base" makeready. Your normal press makeready allowance should be sufficient to take care of unforeseen difficulties that may develop.

4. Watch out for a too-low estimate of the amount of ink required for the job. With ink costing from 50 cents to more than \$2 a pound, it is possible to lose a lot of money on a sizable job. One can miss further on estimating ink than on any other material going into the job. Most of us who make a living by estimating printing are still looking for a safe and sure formula for estimating ink. In using the "area" formula the additional factors of the kind of stock, the character of the form to be printed, and the kind of ink are mighty uncertain. Using whatever method of estimating we may, it is seldom that we figure too much.

A job with one or more big "solids" in it can really consume the ink. A miss here costs money, easily running into hundreds of dollars. Our plant recently farmed out an offset poster job on an estimated price. More than \$200 worth more ink was required than was estimated—and you know what offset ink (colored) costs.

Use all the knowledge that you have and all the information you can get to establish *minimum* allowances per thousand impressions (most of us base our estimates on impressions) for each size press and each

## Removing Ink

To get rid of most of the ink before washing small jobbers, run a little kerosene on the plate and rollers, then pick it up by letting the rollers roll over a page or two of an old newspaper. The kerosene readily soaks up into the newsprint and with it most of the ink. Finish up with gasoline and a rag. While this is often common practice and saves on the hands, it doesn't save anything on time, and it is only worthwhile when both the old newspapers and the waste-paper basket are handy to the press. By Stanton R. Gaylord

type of work. Never estimate below these minimums and be alert to see where they should be increased.

You can fairly well test the adequacy of your allowances for ink by checking your estimates against the amount actually required. After sufficient checks you can, if necessary, adjust your allowance up or down. You will learn the relative absorbing quality of coated papers and uncoated papers, offset and book papers with added bulk.

You will learn to take in consideration the fact that ink for jobs of any size may be bought in containers of five pounds or more and that even though three or four pounds may be left in a container, it will all be charged to the job.

#### Care in Estimating Handwork

5. Here is a warning sign covering all processes in the plant—be careful in estimating all work done by hand. "Hand power" production is always uncertain. The human element is most unreliable although you must estimate the cost of handwork ranging from a \$5 or \$6 hand composition hour cost to \$2 to \$4 in the bindery for men's and women's hand work.

Our own plant has been operating on a system of standards for the past several years and we are well satisfied with it. Adjustments have been few in mechanical standards, but we constantly have to watch all handwork standards, helpers, *et cetera*.

Money can be lost in a hurry on jobs requiring handwork in the bindery where the estimate calls for machine work only. All extra folds after a job is pasted or wire-stitched must be done tediously and expensively by hand. Some inserts can be tipped on to signatures by machine, but if they come "inside" the signature they must be done by hand. More work is necessary if the signature has to be opened up by slitting by hand the untrimmed top, side, or bottom edge. One of the specifications to be carefully determined when the estimate is being made is the location of any and all inserts. If the customer insists on certain positions that involve extra work, you can allow for it when making up the estimate.

Maybe someday an ingenious scientist will develop a machine that will estimate printing faultlessly, but until then the industry will have to struggle along with estimators, infinitely faulty, who do their best to maintain at least a decent average of bids that will bring profit to their employers.

# Printers Can Insure Profits By Controlling Efficiency

★ "Do you realize that efficiency within the printer's own plant is the only factor he actually controls?" asks J. C. Patterson, general manager of F. P. Rosback Company, Benton Harbor, Michigan. "When you consider that labor rates are determined outside the plant; prices, too, determined by competition—plus paper, ink, rent, insurance—yes, within the printer's own four walls he had better control his operating efficiency. It's the only way he can insure his profits!

"It is my observation, based on many years in the printers' machinery business, that printers do not place enough emphasis upon the management function in their own businesses. I believe most printers would agree with that honest statement of mine.

"Usually the printer is mechanically or production minded rather than cost or management minded. He is a grand fellow; often started out with one press he operated by himself. He represents many of the average size and smaller printers we and our colleagues sell equipment to and admire. He and his fellow operators of such plants swing the industry—and don't let anyone tell you differently! But when a new piece of equipment is bought simply because of its mechanical excellence and not as a carefully studied addition justified by cost studies and ratio analy-

sis, that piece of equipment may prove a liability rather than a wise investment.

"The printer who buys equipment one piece at a time without considering the relationship of the new machinery to the over-all plant picture is not using the best business judgment. He might do well to team up with a hard-headed business type who is not too close to the trees.

"From where I stand, it seems that ratio study is practically in its infancy as far as the entire printing industry is concerned. Study the highs and lows of allied industries and even unallied industries. Doubleday and Company found engineers, who knew nothing about book production, very useful when planning a new production line operation that has paid off handsomely. The printing equipment or supply manufacturer often reads many trade magazines outside of his own industry—reads everything he can get his hands on that can help him, spark him with ideas, and render his customer better service. Printers might well profit by making similar outside contacts.

"Business failures are human failures, failures in judgment, personality, decision, ability, and know-how. An analysis of the 9,162 failures which occurred in 1950 shows that 96 per cent of them were directly traceable to the individual who owned the business. Incidentally, two out of every three concerns that failed in 1950 had been in business for five years or less. It is safe to assume that more than a few were printers.

"It is worth remembering that the multigraph machine was first offered to printers, that art department talent has gone from the printing plant to the advertising agency, and that captive plants have sometimes been caused by competing printers rotating bids for some company's printing needs—until that company got wise to the situation.

"Equally expensive to the industry is training men unsuited to the graphic arts industry. Printing is as guilty or gullible as other industries in training the sons of influential customers to become printers, when

(Concluded on page 77)



J. C. Patterson believes printers must learn how to control operating efficiency in order to insure profits

# Krueger Offset Plant Began on Shoestring

• WILLIAM A. KRUEGER is a successful visionary. Back in the year 1934 he foresaw that 1. there were great possibilities in the offset field, and 2. there was little likelihood that he could get his letterpress-printer father to back his belief in the younger field with a litho press. So William A. Krueger put his own and borrowed money into a plant. That plant, back in June of 1934, occupied 1,500 square feet of floor space. By 1939 the floor space had doubled. In 1944 the company bought its present building, at that time occupying 34,000 square feet. A two-story addition was added in 1950—14,000 square feet more. Today the company has 47,280 square feet of floor space plus 3,200 square feet of storehouse space and 30,000 square feet of parking area.

The sales curve has never dipped down for any year during that time. Sales today are over thirty times what they were the first year the firm was in business. That's growth!

There were three employees in that first Krueger plant, including W. A., himself. A multilith, a small camera, and platemaking equipment—practically the tip of a shoestring.

Who are in the backfield of such a team? The quarterback is William A. Krueger, president. He possesses not only a thorough knowledge of lithography but also how to handle people. He also happens to be a specialist in the efficient design, layout, and construction of a lithographic plant.

One halfback is Harry Quadracci, vice-president in charge of production, who was the first employee to join the company. Prior to that time he had operated his own letterpress shop. Mr. Quadracci is widely known in the industry as a top-drawer lithographic technician.

The other halfback, and built for speed, is Robert A. Klaus, vice-president and senior sales executive. Mr. Klaus was the firm's first full-time salesman and has few equals in the process color lithography field.

At fullback is a triple threat man (creator of ideas, copywriter, and merchandiser), Arthur M. Wood, secretary and sales manager. Mr. Wood joined the company in 1939. His *How to Sell Lithography* re-

By George Eaton

mains required reading for anyone allied with the industry.

The above quartet works as a unit. No headline grabbers; all are driving for a touchdown on *every play*.

"Krueger Knows Color" is more than a slogan. *Arizona Highways*, published monthly by the Arizona Highway Department and internationally admired, is the four-color process work of W. A. Krueger Company. From Milwaukee to Phoenix—a mere 2,000 miles! The superb Christmas issue is entirely the work of Krueger, binding and all.

Creative thinking as well as quality workmanship is another string to Krueger's straight-shooting bow. The company prefers to sharpen its wits rather than its pencils. Practical merchandising, advertising, and sales psychology are furnished the customer. Krueger salesmen are advised to "get up before breakfast"—recognize and act upon the trends in the industry, keep abreast of new equipment and developments, read a wide variety of publications as ideas are everywhere.



William A. Krueger saw possibilities in the offset field in 1934 and now has large plant

Creative thinking includes a careful analysis of the customer's problem and determining the ultimate result desired. The mailing list, distribution, production capacity, the trade-mark, and even patent rights are carefully analyzed. If the company does not believe that direct advertising will do the best job, the customer will be told so.

Creative thinking is behind the full-page space consistently in the *Torch Magazine*, monthly publication of the Milwaukee Advertising Club. Over the past decade the firm has not missed a single full-page, three- or four-color ad. The campaign theme in 1950 was promotion of the entire graphic arts industry, including letterpress which Krueger does not do.

## TAOS WAR DANCER

Four-color process lithographed insert shown opposite was produced by the W. A. Krueger Company of Milwaukee for *Arizona Highways* magazine. Western Ways color photo taken by Ray Manley

Creative thinking was behind the firm's spoilage-reduction scheme. A fixed percentage of sales produced is set as a norm. When spoilage runs under this percentage, the difference is divided among the foremen. The result: foremen watch for errors and sub-standard reproduction *before* the jobs have been run off. The spoilage-reduction system has paid off in more profitable production and increased customer satisfaction. The foremen see the ultimate job as a "team" effort and a quality production. The only outside work purchased is intricate die-cutting and laminating jobs. Controlling all of the operations within the plant results in delivery dates that are met.

The cost system at the Krueger Company is elaborate and accurate. The company wants to know its actual costs. Detailed departmental records are kept on a monthly basis. A quarterly review of the reports directly influences the selling rates.

There is more than self-pride at Krueger's. The firm is proud of Milwaukee's standing in the industry. The company is civic minded and its personnel active in social life. Incidentally, the average age of the Krueger employee is *thirty-one*.

Creative thinking resulted in an employee relations program worthy of study. The Krueger profit-sharing plan begins with a point system; all employees, excluding officers of the

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# The Proofroom

ARE THE CONCERN OF THIS DEPARTMENT. QUERIES AND COMMENT WELCOME



By Hilda D. Bump

## WASHINGTON CONSERVATION

Do you remember (or were you able to read then?) back in 1933 when Secretary of the Treasury Woodin announced that *conser-va-tor* should be pronounced *con-serv-a-tor*, accenting the second syllable, "regardless of the pronunciation that was given by the dictionaries."

"The official pronunciation used by this officer," said Secretary Woodin, "is *con-serv-ator*. Should any one wish to justify this pronunciation, he may do so with the explanation that the word now has a new meaning under the provisions of the emergency banking act."

I just ran across an old clipping about this official proclamation. Wonder what happened to it. How's *conservator* pronounced in Washington these days?

We haven't been in Washington lately, but it's safe to say that it has been a long time since any one there worried about how to pronounce *conserve* or any forms of that word.

We were able to read—everything but the handwriting on the wall—in 1933. In fact, we were able to vote.

## THE TOUGH SPOT

Your problems reflect mine exactly, because in our shop here I have tried for years to attain some degree of consistency in style, with, however, pretty good results, when I compare with other plants.

So you are not alone. I noticed in the May issue of another publication that the proofreading article had been devoted to the subject of the scourge of widows. The top of the middle column was decorated by—you can guess—a widow. I found a number of other widows in the book. I wrote a letter to their proofreading expert about it.

Beyond the shadow of a doubt, that proofreading expert sends in his typed copy and his control ceases there. Let's not blame him. Our situation is a bit different. In theory at least, if you find the widow lurking in IP, Bump is directly responsible. Often we make up our own pages. Obviously your widow man doesn't have this (dubious) privilege. Through the years we have

found that the average make-up man (not on this magazine, of course) isn't bothered the least bit about widows.

## LATER THAN WE THINK

How late is late? I get weary of seeing such phrases as "the late Mr. Smith." When do such people cease being late and get just plain dead? Is there any specific time period? I still see "the late F.D.R." Have people quit reading the newspapers?

There is no particular length of time that the deceased are suspended in lateness, so far as we know. We agree that the word is annoying when used unnecessarily. But it has a softer sound than saying someone is plumb daid.

## THE SELF

How about *oneself*? I don't like *one's self*—somehow sounds affected. But I do want to be correct. If *himself*, *myself*, *yourself*, etc., are right, I can't see anything wrong with *oneself*.

We will go right along with you. There are times when *one's self* says it better—when the *self* idea is stressed — one's own individual existence. But for ordinary purposes, *oneself* will do the job.



## Half a Century Ago in the Proofroom



No one has ever succeeded in making a system of rules for punctuation clear enough to work as an effectual guide in every possible case of doubt, and probably it cannot be done.

These items—lifted intact from *The Proofroom of the nineties*, edited by F. Horace Teall—are offered for historical interest only, and not for present-day guidance.

## WHICH AND WHO

Shouldn't this *who* be a *which*? "This ruling has been given out by the State Board of Public Health who licenses, inspects, and regulates the maternity hospitals."

Should be *which*, no doubt about it, unless you'd like to turn the matter into detailed debate. Webster says that *who* is used of persons, corresponding to *which* as applied to things. The board is a thing; members of the board are persons. We have noticed an increasing use of *who* in speaking of boards, committees, firms, and such.

We have a great respect for words (the world's greatest surplus commodity, we heard an editor call them). They shelter, clothe, and feed us. But they were created by man for his use—not to lead him around by the nose. Let's not be afraid of them.

## SIMPLIFYING SPELLING

Re: simplified spelling: In 1935, on a newspaper, orders came to print abbreviations of governmental "alphabetical agencies" caps, close up, no points (AAA, RFC). In 1941 when the paper folded, some of the operators were still dropping points and space bands in. If one can't change in so simple a point the habits of persons preoccupied with the language, how hopeless it is to think anyone can change the public at large!

Webster's rules of spelling have been nationally accepted for almost a hundred years, yet we see *equalling* and *cancelling* oftener than not.

Occasionally an individual on a publication of importance (*Life*, *Time*, the *Chicago Tribune*) gains authority enough to enforce his screwy ideas of spelling, punctuation, etc., on the long-suffering printer folk, but the vast general public takes no notice, and soon or late the authority dies, his screwy ideas die with him, and are forgotten—thank goodness.

(Aside: Tell Lucian Bernhard that a printer named Ben Franklin tried to reform the alphabet 200 years ago. No one paid any attention to him either.)

We agree with you. Most of us never learn how to handle spelling

as is, and we have yet to see a "simplified" method that didn't add to the confusion.

Back in January 1950, we blithely headed a *Proofroom* item "Division Dilemma." That picturesque spelling went unsung until ten months later, when a printer in Saskatchewan had a dull Sunday that he brightened up by reading back numbers of IP. He was particularly enchanted by that "dilemma" because he recently had "corrected" copy from a local theater, changing *dilemma* to *dilema*.

Imagine his chagrin, some time after he perpetrated this horror, on finding that the original copy was correct. He was comforted by seeing *dilema* in IP. He wrote to us for assurance. (His letter was lost for eight months—this is a long story.) Unhappily, we had to tell him that we couldn't spell *dilemma* either. With both of us, memory insists that *dilemma* is the right way to do it.

What a dilemma! Any one else in it with us?

#### STATIONARY STATIONERY

Looks like sales of stationery really would be stationary with a letterhead like the one at top of page 50 in your May issue. Did *Proofroom* read it or is it just a "photographical" error?

We're always afraid to look in cases like this, but it turned out to be a harmless little *a* that should have been an *e* in *stationery*. Came all the way from Sweden in that condition to enter our letterhead contest. *Proofroom* didn't see it until the error was forever entombed in zinc. The design was the important consideration in the contest—spelling didn't count.

Fancy what would happen in any proofroom if a new cut were demanded because of a microscopic *a*!

#### MOST LOUDEST

May issue; Proofroom Department; page 53; third column; fourth paragraph; fifth line; second and third words; to-wit; MORE LOUDEST. Now in your most best opinion; ain't it just as easy and most emphaticest to step beyond the mere little comparative and plunge into the equalest superlative and say; MOST LOUDEST? Uh; uh; I used an interrogation point before inquiring whether or not; it; too; is up for a purging.

Ah, these Texans! Talk only in superlatives. Have superlative use of semicolons. Don't worry, Tex. What female would purge the interrogation point?

*Lousy* isn't a very genteel word, though we have no qualms about using it. *Lousier* falls into the same

category. But we're not going to step on the toes of Luck by saying *anything* is lousiest or most lousiest. We'd certainly wind up in the midst of a demonstration of something lousier than most lousiest. Enough of this—we're getting itchy.

#### STOP

Should words like *ad* and *comp* be followed by a period? I notice that ordinarily you do not use one, but in Mr. Frazier's article in your June issue, he had *ad.* with the period.

Mr. Frazier always uses the period with these abbreviations; we just didn't catch him that time. Both *comp* and *ad* are used so often that they have acquired the right to be considered as words, not abbreviations. (Who sticks the apostrophe before *phone* any more?) We don't care for the period because it is a STOP sign to the reader.

#### FLYING FISHES PLAY

I saw a sign reading "Flying Fish Market" and was so intrigued that I investigated. The fish are flown in by plane—the market doesn't feature flying fish. (Life is full of little disappointments like that.) I think there should be a hyphen in that sign, but where should it go?

One of our competitors has a fine department on proofreading problems—and we are being charitable when we call this one. We recommend that you send your letter there. Let him worry about Flying Fish Markets. We are worried enough about the lack of abalone in Chicago.

#### BIRTH OF THE PLURAL

We have been carrying on a never-ending argument about when the plural begins. The phrase that started the fireworks was "a one and one-half cents stamp." Some say the plural begins with two; others insist that the plural starts as soon as you get past one. How about it?

We're on the as-soon-as-you-get-past-one side. It certainly requires more than one cent to purchase a cent-and-a-half stamp at any post office we patronize.

#### ONE OF THOSE

I go completely berserk when faced with trying to say something like "He is one of those teachers who are (is?) inspiring." There must be an answer.

Confidentially, we sometimes have this trouble ourselves. We would say that it is the most common struggle in putting words together properly.

In a sentence like that, there are two possible subjects, and the verb must agree in number with its subject. Do you mean "one who is inspiring" or "those who are inspiring"? Either meaning is possible. (No boozing from the audience, please.) The writer could mean that Mr. X is one of those teachers (out of a particular group) who is inspiring (the others aren't inspiring). Or he could be one of those-teachers-who-are-inspiring (all of them are).

If you are doing the writing, why not avoid "one of those" sentences? They upset proofreaders, too. Why go berserk? There are other ways of doing it that are more fun.



"There's th' word the boss dislocated his jaw on when he was pinch-hitting in the proofroom."

# Jensen Keeps Employees Informed on Results of Work

• DURING WORLD WAR II naval men found that turret gun crews, who loaded and fired their guns without ever seeing their target, often became discouraged and dissatisfied with their duties. One of the main reasons was believed to be the very fact that they could not see their target or the effect of their fire, but merely served as another mechanical device on the gun. They didn't know if they were hitting the bull's-eye or missing by a mile.

On the theory that people like to know what they are doing, why they are doing it, and with what effect, some commanders tried giving the crews a running account of the effect of their fire. They found a definite turn for the better, not only in morale, but also in the speed and efficiency of the crews.

To a large extent, our modern printing industry faces the same situation. Modern assembly line production has taken the place of the old craft system. This is good and has done much to increase production and lower prices to the point where the public in general can afford good printing. But—it has its dangers. In the old craft system, the workman watched his product materialize under his hands and took a just pride in it. He set the type, did the presswork, trimming, binding, and so on. Not so today in the majority of our shops. Now he is responsible for only one phase of the operation. As a result our "gun crews" often wonder what they're shooting for and what effect they are having on the target. It's true that they probably know when they miss by a mile for we do point out mistakes far more often than we comment on jobs well done.

The Jensen Printing Company (Minneapolis) felt that this was a vital problem and decided to put some effort into letting our people know how they are doing, how their jobs are received by the customer, and how management feels about their work.

Having built a reputation over the past forty-five years for high quality printing, we frequently receive letters from satisfied customers complimenting us on particular jobs we have turned out for them. Many times these are addressed to the

*By William J. Henretty*

**Personnel Director  
Jensen Printing Company,  
Minneapolis**

president or the salesman who handles that particular account. Usually these letters would be seen by a supervisor or two but they seldom found their way to the attention of all of the workmen who had actually turned out the job. Management felt that this was an injustice which should and could be rectified.

Since we had decided that each and every workman should be informed of a job well done, the problem became one of finding the best way to accomplish our objective. The logical way seemed to be to reproduce the customer's letter, add a few comments of appreciation from management, and post them on our departmental bulletin boards.

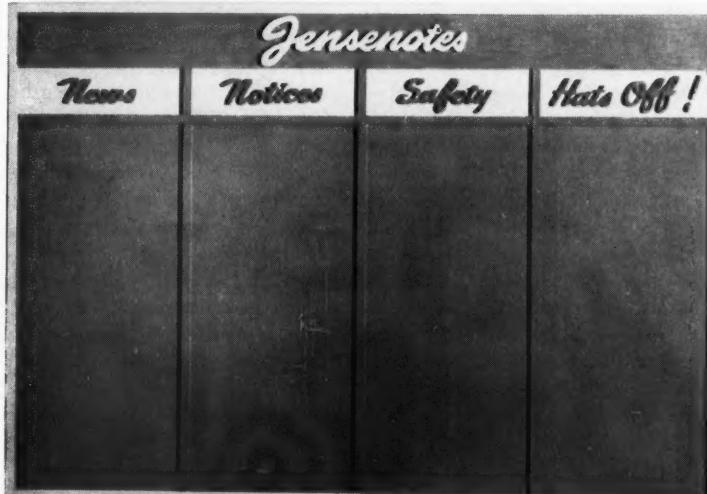
Now we found another problem. Our nine boards were anything but attractive and usually became cluttered with out-dated notices, safety posters, *et cetera*. They were not uniform and would probably cause our new idea to be lost among the other posted material. We felt that the employee shouldn't have to look for it; rather, it should be in a spot where he couldn't miss it. Here was an opportunity for us to do some

house-cleaning on all our bulletin boards and come up with an answer to another almost universal problem: that of the cluttered bulletin board, loaded with old material. Why not make it easy for ourselves to keep our boards uniform, attractive, and up-to-date?

Because we knew of no standard bulletin boards that possessed the qualities we needed, we set out to design and manufacture our own. We had decided that we wanted a sectional board, with definite partitions for news, notices, and safety in addition to our embryo idea on recognition for good work. We met with our art department, our carpenter, our jig-saw man. Together, we decided on a plywood board 36 by 48 inches. The heading for the board would be "Jensenotes" to carry on the theme of "Jensenews," our plant magazine. We would call the new section "Hats Off," the traditional gesture of congratulation, since it would acknowledge good work. All headings would be in script style and jig-sawed out of plywood to be mounted on the board. We would paint it two-tone green in color with reversals taking care of the contrast needed to point up the headings.

There would be provision for a sample of the job, referred to in the complimentary letter, to be attached to the board just below the letter. We would post a weekly re-cap of national news, easily and quickly read, in the news section. Plant news would be posted in the same section as it occurs. Safety posters would be changed weekly and the safety section would also carry plant safety

(Turn to page 74)



"Hats Off!" sections of Jensen bulletin boards carry complimentary letters, samples of jobs that inspired them. Made of plywood, 36 by 48 inches, nine boards are used.

# Robert Oatman Vandercook

● June 8, 1951, marked the end on this earth of the man who in the opinion of this veteran observer did more for more printers than any other through the past two generations. More exciting inventions and developments came about, but they affected comparatively few. In his advocacy of precision and in his invention, development, and manufacture of tools to bring it about in the machines and methods employed by printers, he contributed tremendously to improvement both in the quality of printing and in the profits from doing it. Making them conscious of the frightful waste in press makeready and showing how to avoid most of that waste has unquestionably profited printers to the tune of millions of dollars. Printers should arise and call that man — Robert Oatman Vandercook — blessed!

When he launched forth on his crusade for cutting time and improving quality in one operation, it was tough going for "Bob," as Rotary fellowship permitted your writer to address his elder superior. The old hand roller proof press sufficed, printers would say. "What's a proof press for except to detect typographical errors," they would ask, "and an occasional letter smashed beyond recognition?" More delicate inaccuracies which were to result in loss of time of the presses did not occur to these printers. The "trouble" with Bob Vandercook—quoted is the word because the condition was not his—was that he was a generation ahead of his time.

Our friend who has left us established a name which will remain prominent in the printing industry throughout the ages, like, for instance, Mergenthaler. Certainly more of us should know more about the man, especially as he was a very potent man—and modern in thought to the very end.

Robert Oatman Vandercook was born in Bennington, Vermont, on



August 16, 1866, and as a small child was brought to Evanston, Chicago suburb. He passed away at Evanston, where, except for two years in California, he spent the four score of his years after Bennington—an active, honored citizen.

His interest in printing started when as a boy of ten, "Van" (as many called him) bought a toy press for \$1.50 and began doing printing at his home for neighbors. When, four or five years later, he entered Evanston high school as a member of the first freshman class, he had bought a \$500 printing plant.

In due time he entered Northwestern University and established a company which was the predecessor of the present University Press. His shop was located in the basement of the gymnasium where he printed, among other things, the campus newspaper. Bob had time for college sports, an indication of capacity, just one of his sterling qualities. Incidentally, it is believed that for some years before his death Bob was the oldest living "letter

man" of the great university from which he graduated in 1888.

When through with college, he founded the *Evanston Press* which he edited and published for fifteen years. Frances E. Willard, temperance crusader, supplied Bob with a weekly article. High point in his publishing career, however, was reached in 1898. While the nearby Chicago newspapers were in the midst of a strike he arranged with a friend at Washington to send him frequent telegraphic reports on the progress of the naval engagement at Santiago which ended the Spanish-American war. He thus demonstrated his quality of awareness and his appreciation of the dramatic.

Mr. Vandercook sold the paper and moved to California in 1906. On returning in two years—he established the Vandercook Press Company to build proof presses consistent with his ideas of what they should be.

Throughout his active life Bob Vandercook was a crusader and innovator. He pioneered in travel by airplane—even rode with mail pilots before commercial lines were established. By means of magazine articles which he employed in his crusades for betterment one way or another he carried on a campaign to encourage air travel.

Once his business was firmly established and his three sons—Edward, David, and Fred—on the job he became an inveterate traveler. He loved to go places—see things. He made many trips to Europe and South America and wrote numerous articles aimed at encouraging trade with our Good Neighbors south of the U.S.A. His foreign travels continued until 1938 when threats of war stopped him.

Rest in peace, good friend of almost forty years—great benefactor of our industry for just as long. You are gone from, but not forgotten in this lesser world below Heaven.—J.L.F.

# Specimen Review

SPECIMENS FOR CRITICISM MUST BE SENT FLAT, NOT ROLLED OR FOLDED. REPLIES CANNOT BE MADE BY MAIL. • By J. L. Frazer

THE COGGESHALL PRESS, of Utica, New York.—You may feel proud of the annual report for Utica and Mohawk Cotton Mills; presswork both one-color and four-color process is excellent, the best feature. Typography is also excellent, layout very good. The cover design is striking, the feature being pictures of bolts of white sheeting material tied with blue ribbons which appear in rows—and at an acute angle—across the page with deep yellow (the process color with screen in black overprinting) between the rows. For ourselves at least, we'd prefer a brighter blue as second color—display lines, *et cetera*—on typographical pages. The blue is so deep in tone that it affords too little contrast with the black printing. A lighter, brighter blue would brighten up these pages materially. It is a fine piece of work, nevertheless, a report the company may justifiably be as proud to distribute as you no doubt are for having produced it.

MIRELES PRINTING COMPANY, of El Paso, Texas.—We like your blotter headed "A Satisfied Customer is Our Best Advertisement" because it is simple in arrangement. There is effective contrast between elements, adequately and nicely "whited out"



## MAY

and most of all delightfully readable. There is just one fault. The solid panel in color over which the heading prints black isn't right—that is, deep enough. There is margin above the first line of the type—on the right, too. The bottom of the second line of type strikes at the very bottom edge of the color panel and the two lines begin almost at the left-hand edge. It may be that was your idea, but we cast our vote for more or less uniform margins around the heading. As printed, the effect of being considerably out of register is given. If the color plate were much larger, there might, in the massing of open space effected, be point to having the left side and bottom of the type group strike close to left side and bottom of the color panel.

MID-WEST PRINTING COMPANY, of St. Louis.—We are not in the least surprised to learn your letterhead received an honor award in the Gilbert Paper Company's competition. It is good-looking and very impressive at one and the same time. Featured is the illustration of head and shoulders of an Indian warrior of a fine line technique and printed in colors. This, just below the two main lines—your name and "commercial printers"—is in the lateral center with illustration

When you turn your printing problems over to us, your worries can go fly a kite. We worry every inch of the way for you—watching your deadlines and demanding the utmost from our battery of printing craftsmen.

LeFEBVRE PRINTING COMPANY  
Telephone EASTgate 7-2431

THE P. A. BASSETTE COMPANY  
PRINTERS  
Marlborofield, Massachusetts

No apology is offered for the showing of another Bassette blotter. Of identical design month to month, the pictures are changed and they are "sweet." At left and right are advertisements from back page of a Chicago printer's house organ. While layout doesn't thrill, we like pictures and heads. That big, distinctive lettering can do the job of commanding attention effectively is suggested by the reproduction of folder below



## The Fly in the Ointment

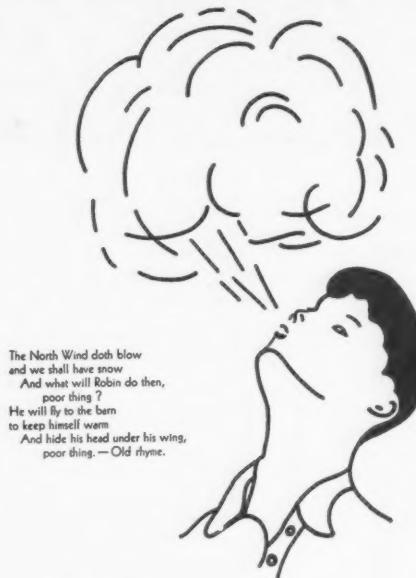
We feel sorry for the fly in the ointment. He thought he had something pretty good and now he finds he's stuck with it.

Don't be stuck with poor quality printing; or printing delivered so late it's useless to you; or exorbitant prices.

We guarantee our work, we stand by our price estimates and we deliver the goods—on time.

LeFEBVRE PRINTING COMPANY  
Telephone EASTgate 7-2431

The north wind doth blow



The North Wind doth blow  
and we shall have snow.  
And what will Robin do then,  
poor thing?  
He will fly to the barn  
to keep himself warm  
And hide his head under his wing,  
poor thing.—Old rhyme.

Title page done some years ago by John W. Deal, Rochester, New York. Mr. Deal says that he occasionally studies old work and that if it still looks all right it is good. It's a good page; open effect is highly suitable. On the original second color is pale green

of a train of covered wagons, and what traveled with them across the plains, trailing along in a wavy line from picture to edges of sheet—properly in a weak color, yellow. Only adverse criticism—if it is justified—is that design might take up too much space vertically. If true, Indian head could be made a bit smaller without disadvantage and group of small Copperplate type giving address and telephone moved up somewhat, even though it should strike over a little of the picture of the caravan. It is all most pleasing, and what is more there is a quality look about the piece which should impress business man wanting something nice.

**THE RUMFORD PRESS**, Concord, New Hampshire.—As usual, the calendar scores high in interest and excellence in the four-color printing of illustrations occupying something more than upper half of each month's leaf. For the most part these pictures are scenic, range from the snow-clad hills to hills with verdure at its best, on to beach scenes with bathing beauties at their best in our eyes, and on to one of a characteristic New England home the like of which we have never seen elsewhere, a big one with the barn joined onto the house. So many calendars look as if the figures resulted from the longest possible search for the ugliest that we lose no opportunity making a note of it when one comes along on which the figures are of the finest design. Finally, we note that the heavy back stiffener is die-cut to open out for an easel. We do not doubt that even though the piece measures 8½ by 11 inches a great many copies stand on the desks of men who like nice things, and especially the nice



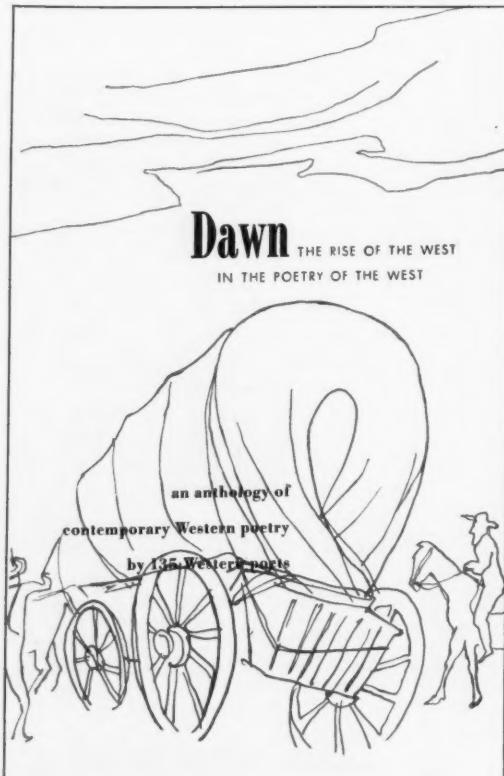
MAY • 1951

## Reflections

On original of approximately 3½ by 8½ inches what is black here is deep green and what is red, light brown. This cover from magazine of The E. F. Schmidt Company, Milwaukee, is printed on thick stock of a light and soft yellow hue

things about your "country." We look to Spring, 1952, for a new edition, our eyes hungry.

**G. H. PETTY**, of Indianapolis, Indiana.—Typographically, you made a vast improvement in the ticket for the Royalton Steeplechase. Last year's card is just a succession of lines in bold sans-serif type, monotonous in its centering throughout. Handling



Typographically this front of folder simulates title page of book it advertises, but the picture is from an end leaf. The beautiful book was produced by Wallace Kibbee & Son, of San Francisco

CLUB OF PRINTING HOUSES & BUSINESSES  
OF NEW YORK C.

**Silk Screen**  
6:30 P. M.  
**April 19th**  
BUILDING TRADES CLUB • 2 PARK AVENUE

Boom! Title page of meeting announcement displays the artistry of modern sans serif type. Imagine the effect set in one of the old block styles, nearest approach a generation ago. What is more, the layout is highly suitable for type of this kind

by you is stylish and restrained, of good layout—excellent, in fact—and types are in keeping in both respects. Off-center arrangement with the main lines flush left and irregular on the right means the composition is interesting in its contour and otherwise. While thus viewing the cards, two points come to mind. Could your job be too nice for the purpose? Now, get us right. Nothing can be too nice, but should the treatment of a race track ticket have the air of a brochure concerning diamonds and pearls? However, let that be considered a moot question. The second point has constructive importance. You have printed your card in delicate type—your own favorite, Bodoni Book and script of a matching tone—on blue card stock, and no tint of blue, whereas last year's ticket set for the most part in bold-face sans is printed on white card. Your type is weak in tone in relation to background. Esthetically the composition of the former card would be improved if it were on the blue stock. Avoid printing delicate types on stocks which are comparatively deep in tone value.

NICHOLS & ELDIDGE, Brockton, Massachusetts.—Circulars of the United Business Service which you have produced score very high and it is not surpris-

ing they won one of the "Best in Industry" awards of Direct Mail Advertising Association at the Chicago meeting last fall. Graphic display, which hits one right between the eyes with copy that commands reading, and exceptionally skillful organization are outstanding qualities, fortunately because those things are of outstanding importance to the objective—results. We cannot imagine those features better cared for. We admire most the enclosure of a size for Number 10 envelopes. Headlines of these are effectively paneled with, usually, color within the panels back of the type of the display. No tricks are employed, only sound devices of display and layout which can be depended on for resultful promotion material. Limited display, and that strong by contrast, with readable text assure anything printing for business can insure. The more stylish types in some cases help esthetically but your type and lettering are nevertheless excellent for the purpose, quite possibly might impress average business man more than styles of greater artistry. The only suggestion we can offer on the work is that you might survey this angle. The presswork is commendable.

THE FINDLAY PRINTING AND SUPPLY COMPANY, of Findlay,

MARCH 1951

## EM-PICA



Contemplate bright blue where screen in black appears around the red cross and you'll agree this is one of the best of many covers from magazine of the Mack Printing Company you've seen on these pages. Use of many pictures in text pages shows generous budget allowance



Front of Chicago restaurant menu demonstrates effectiveness of wide rules—18-point on the original—in achieving strong and interesting effects



Here's power! Cover of 8½- by 11-inch brochure proves it pays to "make it big and keep it simple." It is creditable even to Caterpillar, Peoria

Ohio.—Congratulations on reaching the ripe old business age of twenty-five years and we're not being facetious, or trying to be funny. We have read some place and at some time that the average life of business concerns is about three or four—maybe, five—years, no more than that of dogs where fifteen is equivalent to a hundred in humans. It would appear that there

some of the halftones being rather gray. We appreciate what there is of fault is with the photographs, not the presswork. When black printing looks gray that effect of snappiness which brightens a job of printing is lost. Also, insist on photographs where the solids are really solid and highlights really high in value; it is contrast of tone which makes the halftone illustration.

**IN CONGRESS, JULY 4, 1776.**

# The unanimous Declaration of the thirteen united States of America.

## The atlantian

Summer 1956

**Looking back, we're glad we helped start on the comeback trail—assisting them obtain employment—two printers temporarily deprived of their liberty. Seeing the job printing and the publication through the years, we have been impressed with the talent and interest in work of residents of corrective institutions. We've been impressed, also, with efforts of men in charge to aid their wards. Thoughtful planning preceded this cover from place in Atlanta. Field of stars on original is in blue.**

is justification (or excuse) for some printers complaining about living a dog's life. We wish we might have attended the open house in connection with the opening of your new plant, but we're glad to see the souvenir brochure issued to commemorate the event and show the folks who couldn't attend what a fine modern plant you have. The brochure is well organized and layout, including placing of half-tone illustrations, is excellent. We'd prefer stronger "color" on inner pages,

The cover featuring illustration of front of your new plant is highly impressive and the color combination of green (trees), dark yellow (brick construction) and black is excellent, of course. It makes you look fine.

**GREER PRINTING COMPANY**, Duluth, Minnesota.—Except for a couple of rather minor details we consider your new blotter on subject of modern type excellent. Featured on the left side, we like the solid panel shaped something like an artist's palette, printed in

yellow with effective copy overprinting in black as follows: "Latest Fashion Sells Women's Clothes," "New Models Sell Automobiles," and "Modern Type Sells Merchandise." This adds up to quite an effective showing of new type, bound to have an effect in developing appreciation for stylish, modern faces on the part of business men—customers and prospects. O, for what is, maybe, wrong! The yellow is quite "lemonish," very sour to our taste on process work where it is just a component seldom appearing in its stark self. It is in our judgment—that's right, *judgment*—no color to use in printing type and typographical utilities such as rules and ornaments, or pictures. That is true not only because there must be many, like your correspondent of the moment, who don't see merit in the hue but because it is the weakest in tone of all colors—nearest white, in fact. So, it doesn't show up on white. It is accordingly excellent on black, but, unfortunately, black paper is not common. Now, if you had mixed a pinch of orange with the process yellow, making it chrome—O, boy—it would have been a lot better. Even so, with red used for the initial, a display line, and a cut-off rule above the signature, bright blue or green would have made the piece much more pleasing. According to surveys and statistics resulting from them, blue is the favorite color of men by long odds. Few dislike green and you issued the piece during the green season. Also, don't forget that warm colors should be used in small areas; yellow is not only warm, but hot!

SENTINEL PUBLISHING COMPANY, of St. Cloud, Minnesota.—Use of red stock which glows with dazzling brilliance for the folder enclosure of Telephone Answering Service assures attention—maybe something of a shock when it is removed from the envelope. In view of the considerable amount of copy in comparatively small type on the back page the piece, in our view, is not the kind of thing for the glo-coated stock. Its brilliance does handicap reading and one must be conscious of it all the time while reading. For posters, covers, and items where there is little copy—and that in big bold type—the brand of stock should enjoy wide use, but in all printing the type is the thing. A couple of errors, not serious at all, were made in printing the piece. Matter on the front page and center spread is printed the long way, that on back page the narrow way. When the piece is held for reading the front or spread and then turned to page four the top is reversed from what it should be to come right side up for right handers who are in a very great majority. Try this yourself and you will see the turn to bring back page right side up is awkward, unless you are left-handed. It's seemingly a small matter but might have an adverse effect with some people not especially interested in what's printed anyway. Lines of the text on center spread are much too long

in relation to the size of type. Too many shifts of vision from start to end of such long lines are disturbing and, besides, there is the danger that a reader finishing one line will not locate the beginning of the next with ease and certainty. Some one at some time expounded the rule that the ideal length for a line is an alphabet and a half of the lower case type in use which would mean about thirty-nine characters. This gives recognition to fact that big type can be set in longer lines than short lines. Our personal view is that lines may very well be longer than thirty-nine characters but if you'll do some sampling of type in different

Bliners, inserted with statements, etc., takes no more postage—they are appreciated by the housewife—thus presenting good, long-life advertising. Why not give us an order today for your supply?



**IN ANY RACE** on any track, where quality typography is a factor, you will find Peterson Printing in the winning lane. — PETERSON PRINTING SERVICE, COUNCIL BLUFFS, IOWA, PHONE 3-2184

Effective stunt, this, using identical cut twice in a job. On original blotter leading horse is gray



GOOD calendar can help your business! It tells your prospect about you every day—keeps you in his mind. We produce Calendars, Business Announcements, Letterheads, House Organs, Privately Printed Books, Booklets, Folders, Broadsides, Financial Statements, Bookplates.

We specialize in QUALITY PRINTING at no extra cost.

MAY 1951

Sunday	*	6	13	20	27
Monday	*	7	14	21	28
Tuesday	1	8	15	22	29
Wednesday	2	9	16	23	30
Thursday	3	10	17	24	31
Friday	4	11	18	25	*
Saturday	5	12	19	26	*

THE MARCHBANKS PRESS

114 East 13th Street, New York 3  
Gramercy 7-6420

It's great to receive again specimens like this blotter from pioneer quality printer. "Hal," himself, showed us many of the fine things he produced

measures you will see for yourself that the extremely long lines do handicap reading.

SCHNEIDERETH & SONS, Baltimore, Maryland.—That folder of yours titled on the front with "That Trusted Employee, Saint?" is not only exceptionally well handled as would be expected coming from your house but decidedly cute—eye appealing, impressive, convincing, and so on—at the same time. Best word description means to explain page three first. Featured is picture of a man's head with wings

sprouting at the shoulders and an enclosing frame printed in deep blue as is the text of the page. Second color, a medium yellow-orange, is employed for the display above the framed picture—the line "or Sinner?"—also hair of head and some horns, also on the head, a suggestion of clothing, and an opened safe deposit box in the foreground being ogled by the gentleman of the portrait. With the second color part of the picture use of the term "gentleman" seems inaccurate. Fellow looks very devilish with his horns, red hair—or more probably hood—and sharp-pointed second set of ears. Now, readers, "Front!" The frame there is a repeat of the one on page three with the frame die-cut out all around the inside. Showing on the front through this cut-out panel is a sheet of red acetate glued at top of second page. It is eye-arresting. It filters out the color sections of the picture printed on the third page, leaves only a pleasant looking gentleman (he looks the part) showing within the frame, the "Saint" referred to in the title which appears just below the frame. We haven't seen all of it yet. Near the bottom of page two we see through the red acetate a panel set aslant and word "Moral" near its upper left-hand corner. We raise the acetate and—lo and behold!—see what we didn't see before because it was filtered—the copy "Insured honesty is the best policy" in two lines printed in the orange color. It is tremendously impressive, ought to do business for your customer, Fidelity and Deposit Company. The essence of the idea could be put to many varying uses by different printers all over the country.



O h, yes—  
business with us is very,  
very good—and we attribute  
it to the fact, that we  
produce quality printing  
at no extra cost.



THE MARCHBANKS PRESS  
GRAMERCY 7-6420  
114 East 13th Street, New York 3

June 1951

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
*	*	*	*	*	1	2
*	*	*	*	*	*	*
3	4	5	6	7	8	9
*	*	*	*	*	*	*
10	11	12	13	14	15	16
*	*	*	*	*	*	*
17	18	19	20	21	22	23
*	*	*	*	*	*	*
24	25	26	27	28	29	30
*	*	*	*	*	*	*



Some aver restraint and glamor don't march in the same parade, but this blotter raises a question

## Be Happy, Go Bundscho!

J. M. BUNDSCO, INC., Advertising Typographers

180 NORTH WABASH AVENUE • PHONE RANDOLPH 6-7292 • CHICAGO 1, ILLINOIS



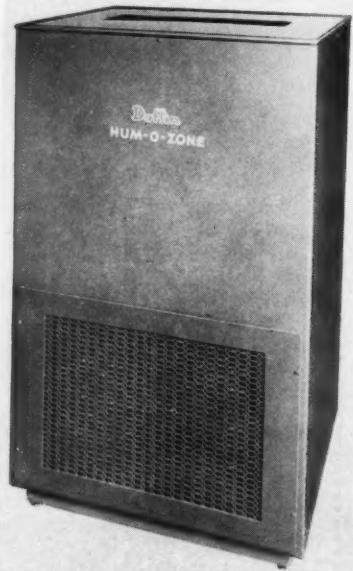
Leading typographer adapts title of radio and television song of Lucky Strike to strike home himself

# What's New?

# in Equipment and Supplies

## HEAVY-DUTY HUMIDIFIER

HUM-O-ZONE Model 300-B, a new model heavy-duty high capacity humidifier is made by Daffin Manufacturing Company. The unit uses a high pressure pump which breaks up water through specially developed nozzles.



Moisture output is adjustable on this new unit

The apparatus measures 22 by 26 inches in width and is 42 inches high. Unit discharges approximately 1200 cubic feet of air per minute. Moisture output may be adjusted to fit individual industrial requirements. Unit is powered by a 1/3 horsepower electric motor. The Hum-O-Zone operates independently of a heating system and requires only a cold water supply and a 110-volt alternating current in most installations.

## WRAPPING MACHINE

CRAIG KEMP Automatic Enveloping Machine, which automatically fills and seals envelopes, is announced by Craig Kemp Limited. The machine operates at 2,000 magazines or catalogs per hour. Reloading is performed without stopping or slowing down the machine. Finger adjustments reset the apparatus for different magazine sizes — up to 11 by 9 inches. The machine is primarily designed to load one book, magazine, or catalog into each envelope.

lope. Printed matter should be pre-collected and fed into the machine by hand. The basic action is a reciprocating inserting hand which picks up a magazine from one hopper and inserts it into an envelope in the adjacent hopper. The envelopes are then pushed out down a chute, passing the flap-sealing attachment. The envelope is opened by a pneumatic system driven by a reciprocating pump. Dimensions of the machine are: 6 feet 8 inches long; 21 inches wide; and 3 feet 8 inches high. The sealing attachment adds 3 feet to its length. Power driven by a 1/3 h.p. motor, the machine weighs 300 pounds. Hambrø Machinery Division of New York offers this machine.

## PAPER ROLL CLAMP

AUTOMATIC TRANSPORTATION Company announces a wrist-action paper roll clamp for industrial trucks. Designed for handling paper rolls, the capacity of the attachment is 2,000 pounds. The clamp is said to handle rolls with a diameter of from 24 to 28 inches; and it is mounted on a 4,000-pound capacity Skylift electric truck. Vertical and horizontal operations of the device are controlled by push-buttons, but clamping is governed by a rotating switch coupled with an automatically operated pressure switch. The pressure switch controls a hydraulic pump. The Automatic Skylift truck on which the clamp is mounted tiers to 132 inches. The clamp revolves through 360 degrees in either direction.

## RUBBER PLASTICIZER

RUB-R-VIVE, a rubber plasticizer available from the Schwartz Chemical Company, is said to prolong the performance life of all rubber products used by printers, such as rubber feed rollers, platens, blankets, motor belts, and suction cups. The chemical is applied by cloth or brush to rubber parts or surfaces. The product is described as being a non-inflammable and non-volatile liquid.

## NEW ENGLISH FACE

VERONA, introduced in England by Stephenson and Blake of Sheffield under the name Bologna, is now available from American Type Founders. It is cast in nine sizes up to 48 points. Verona is a modern adaptation of a manuscript style originated by the fifteenth century Italian Humanists. The

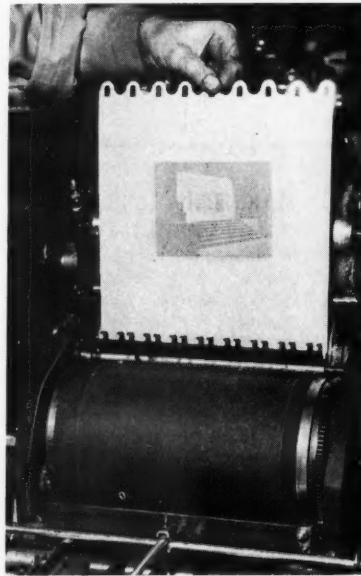
face will combine with such soft informal types as Garamond, Cloister, Nicholas Cochin, Goudy, and Bernhard Modern.

## VACUUM CLEANER

SYNTRON air pressure vacuum cleaner, developed by Syntron Company, operates on high pressure (70 to 160 pounds per square inch) compressed air, is made of aluminum and plastic stampings, and has the dirt-collector bag inside the cleaner. The unit comes complete with a 12-foot length of air hose ready for operation.

## PHOTO-OFFSET PLATE

A PRE-SENSITIZED aluminum photo-offset plate for use on Multilith and Davidson presses is announced by Minnesota Mining and Manufacturing Company. The plates are .005-inch thick. They have zero stretch, the company states, and halftone screens up to 300-line will reproduce perfectly. Besides sharper copy, the handling

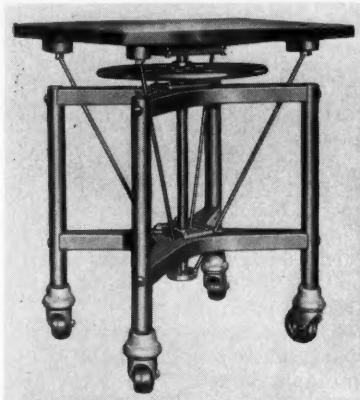


Aluminum photo-offset plate is pre-sensitized

speed is claimed to be 5 minutes from package to press. The plates are made in two sizes: 10 by 15½-inch serrated plate for use on the Number 1250 Multilith press; and a 10 by 16-inch straight-cut plate for use on Davidson presses.

#### ADJUSTABLE TRANSFER TRUCK

NUMBER 2614C01 transfer truck is available from the Hamilton Manufacturing Company. This new adjustable truck has been designed especially for plants where rapid transmission of forms from make-up tables to mat roller is essential. The truck has an adjustability range of 4½ inches, from a minimum height of 36¾ inches to



Hamilton truck speeds up transmission of forms

a maximum height of 41½ inches. Adjustment is by means of a large wheel under the surface. The top is 24 by 30½ inches, made of cast iron. The casters have ball-bearing swivels and roller-bearing wheels, which facilitate moving the truck.

#### NEW COLD TYPE DEVICE

JUSTIGRAPH, a photo-justifier in the "typeless" printing field, is now being demonstrated by Leroy F. Dyer. The Justigraph utilizes carbon impressions from the modern proportional-spacing typewriters, handles a complete line as a single unit, and employs neither electric contacts nor electronics nor pneumatic devices. An experimental model is said to produce three lines per second, equal to one column of newsprint spaced nine lines to the inch per minute. Speed is not affected by the length of lines; it depends upon intensity of light used, the f value of the photographic lens (the ratio between the diameter of the opening and the focal length of the lens), sensitivity of the photographic emulsion, mechanical design and driving power of the machine. All lines in error are automatically deleted by the Justigraph, it is claimed. In addition to justifying, the Justigraph adjusts the size of type and the line spacing.

It is announced that in commercial models, automatic processing will make the machine fully automatic. Copy and sensitized paper will be fed into the machine, and the trimmed reproduction copy of photographic quality will then emerge. By substituting film for paper in the positive unit, a film positive will result, ready for direct printing down on metal. The Justigraph is claimed to be the only machine which can auto-

matically bridge the gap between a piece of typewritten copy and a film positive which is adjusted to size and ready for use.

#### NEW DWIGGINS FACE

ELDORADO, a new type face designed by W. A. Dwiggins, has been cut by the Mergenthaler Linotype Company. It is available with italic and small caps in 6, 7, 8, 9, 10, 11, and 12-point sizes. The type face provides maximum spatial economy without sacrificing nicety of design and readability. Eldorado has a density of color and sturdiness of design that places it in the general category of Bookman, Garamond, and Century. Samples are shown below.

ABCDEFGHIJKLMNPQR  
STUVWXYZ&1234567890

ABCDEFGHIJKLMNPQR  
STUVWXYZ&1234567890

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

ELDORADO, Linotype's newest type face, was designed by W. A. Dwiggins, from whose drawing board have come Metro, Electra, and Caledonia. Combined with Italic and Small Caps, Eldorado is available in seven point sizes, from 6 through 12 point.

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#### SPACEBAND MACHINE

HARTCO spaceband machine is now distributed exclusively by Linotype Parts Company. The machine, which cleans and lubricates spacebands in composing rooms, is said to remove metal accumulations from the spaceband sleeve and to lubricate all portions of the spaceband—at the rate of thirty spacebands a minute.

#### CALCULATING AID

MARGIN MASTER is an aid for type positioning and margin calculations made by the Reynolds Company. There are nine rectangular Margin Masters to a set. Inner straight edges have half-pica rules. A pencil line along the edge and the removal of the Margin Master from a copy page are said to furnish an immediate picture of a standard size type-spacing problem and its answer by visualizing the type, properly spaced, within the areas which are commonly used.

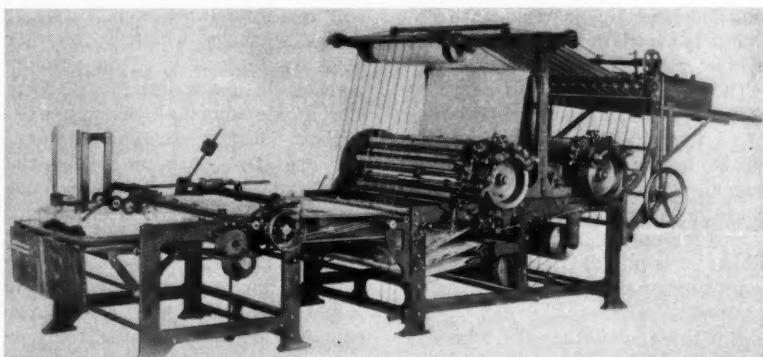
#### CALEDONIA FIGURES

OLD STYLE roman and italic figures are now available for all point sizes of Caledonia and Caledonia Bold from Mergenthaler Linotype Company. This includes Caledonia with italic and small caps in 6- to 14-point sizes; Caledonia with Caledonia Bold in 6- to 14-point sizes, and Caledonia Bold with italic and small caps in 6- to 14-point; The figure 3 in the lining form in both the regular and bold weights of Caledonia has been redesigned.

#### RULING MACHINE

A LINE OF WILL sheet-fed ruling machines is being marketed by the Amsterdam Continental Types and Graphic Equipment, Inc. Made in Germany, the Will machines are available in nine different models, single-sider or double-sider, to perform both faint lining and strike ruling. They also are equipped for slitting, perforating, grooving, and design printing. A long absorbent cloth over the ruling cylinder is said to assure a clean and clear impression.

Sheet sizes handled on the different models range from a ruling width of 31½ inches and a printing cylinder circumference of 31½ inches on the smallest, to 39½-inch ruling width and cylinder circumference of 42½ inches on the largest. Weights range from 3230 pounds to 4380 pounds, net. Standard dimensions are 16½ feet in length, 5 feet 5 inches in width, and 6 feet 3 inches in height. Speed, precision, ease of operation, and space economy are features claimed for the new sheet-fed ruling machine by the manufacturers.



Speed and space economy are two of several features claimed for this German-made ruling machine

# The Salesmen's Corner

By FORREST RUNDELL



• JUST WHAT IS THE PROBLEM we are up against in selling printing these days? There seems to be little agreement. One salesman says "I'm doing fine—running thirty per cent ahead of last year. But the rest of the fellows aren't doing so well. The firm laid off about ten of them."

And so it goes. Some salesmen are doing better than the average; others are falling behind. But conditions on the Eastern Seaboard do not measure up to what the printers there would like to see. Paper conditions are subnormal. Paper is available but sources of supply must still be watched carefully.

It has been less than a month since one printer found that he had a shipment of sulphite on his hands which he could blow through. And another printer discovered that he had a shipment of paper which was hopelessly below the quality he thought he was buying. Fortunately, he had kept the sample on which he made the purchase and so was able to insist on equivalent quality from the paper house.

## Smaller Letter Paper

These deliveries are not the rule at present, but enough subnormal deliveries have been made to warrant the utmost caution on the part of the printer. Make sure you get a sample of the paper you plan on buying and keep that sample until delivery is made. In that way you can protect yourself.

One way in which you can conserve paper for the average buyer of printing in this: When you get a sizable order for letterheads, talk over the matter with the buyer. The usual letterhead is 8½ by 11, cutting four out of a 17 by 22 sheet. This size is useful when letters run long, as they do with many lines of business.

But there is another size which is just as useful and may be used for a great deal of shorter correspond-

ence. We refer to 7 1/3 by 8½. This cuts six letterheads out of a 17 by 22 sheet without waste and serves the purpose for many customers. Why not save one-third of the paper by delivering part of the letterheads in size 7 1/3 by 8½? You will have just as much printing to do and your customer will have just as many letterheads. Talk it over with him and get him to try it. Neither of you has anything to lose and the saving of paper will be worth while.

## Get Rid of Dead Metal

As for type metal, there seems to be little chance of running short unless things get much worse than they are. With so much type being set by Linotype and Intertype as well as Monotype, All-Purpose Linotype, and Ludlow, printing offers no drain on outside sources of metal. As long as printers sell their scrap metal only to buyers who will keep the metal in the industry, there is no danger of shortage.

At the same time it will be well for salesmen to check with their customers to find out whether they are carrying any dead metal in the hope that they may get repeat orders. Some customers have a way of being too optimistic about chances of reprints. If you arrange to bill for standing matter at a reasonable rate per page, you may find that they will readily release such metal.

The shortage which is proving most troublesome is in the sulphur market. As one writer put it, "The world-wide shortage of sulphur—without which modern industry cannot operate—continues to be the most critical pinch in the defense program." The only immediate solution to the shortage would be a lucky strike in the Gulf Coast area, where sulphur domes are located. While sulphur producers have spent large sums of money searching for new deposits, extensive discoveries are rare. The risk involved in new ex-

plorations is great because a complete plant to supply hot water and compressed air must be built before it can be determined whether or not sulphur can be mined in sufficient quantities to make the mine a commercial success.

In the absence of a lucky strike the long-term solution of the sulphur problem revolves around price. Reserves of high cost sulphur are available but economics are against their use at present. The price of sulphur ranges from \$21 to \$22 a ton, with instances reported where Italian imports have been sold as high as \$100 a ton.

Although economic controls prevent a price increase to restore the normal balance between supply and demand, trade circles foresee an eventual rise in prices to provide the impetus for greater sulphur output from all potential sources.

The productive capacity of a nation is said to be measured by its use of sulphuric acid. This is the first time since World War I that there has been a shortage of sulphur. The shortage first began to make itself felt in 1950. Today it is estimated that there is less than five months' supply of sulphur above ground. This stockpile has fallen from a two-

Copy idea

## Wolves in Sheep's Clothing

It is deplorable that there are so many wolves in sheep's clothing; but it is far more discouraging to think of the multitude of sheep in wolves' clothing!

What we mean is that, much as we regret that the numerous shady "business propositions" masquerade in high-falutin' printing (and thereby are "put over"), it is absolutely tear-provoking to consider just how many substantial businesses afford themselves less than half a chance by running around arrayed in ragged printing.

So analyze your advertising-printing; compare it with others; and if it is found wanting, the thing it will be wanting is a helpful advertising-printing service, such as many firms find right here.

year reserve, and industry officials believe that there should not be further withdrawals such as the 350,000 tons withdrawn last year from stocks previously mined. This means that current needs will have to be met from current production. And world shortage this year is likely to amount to as much as one million tons.

#### **Sulphur Situation Serious**

The paper industry is one of the great users of sulphur. In the manufacture of sulphite and other pulps, 435,000 long tons a year are used in the United States; Canada uses an additional 250,000 tons. Canada has informed our government that more sulphur must be furnished to her or we will get less newsprint from her mills. Fortunately Canada does not come under export quota but is treated as a domestic user.

Demand for sulphur is such that the government has found it necessary to apply export quotas, as exported tonnage totaled 1,050,000 out of a domestic production of 5,200,000 tons annually. The export quota was placed at 480,000 tons by the National Production Authority officials for the first half of 1950.

Today ninety per cent of the domestic sulphur comes from the Gulf Coast. The world has become so dependent on United States sulphur that it cannot convert quickly to any other sulphur-bearing materials.

So now you see why you are asked to save your old papers and have them picked up and sent to the scrap mills. And the more long-fibred stock you can save the better off we will be.

But what can we do about the present slump in printing orders? Well, in the first place we must realize that much of the slump in printing is due to business waiting for the Congress to act on the question of expanding the war powers of the administration. No man will start an advertising campaign until he knows whether or not he will have something to advertise. Big plants will wait until they know whether they have anything to advertise before they make plans.

This, of course, is not true of firms which have made their switch to war work or are in the process of doing so. Such firms will be in the market for instruction books and forms to assist in their manufacturing processes. They will want forms they have never had before to assist in their war work. In fact, the printing they will need will be equivalent to that which would be needed by an entirely new customer.

## *Showers Bring Flowers*

Much of the success of your bloom of orders and collections depends on your cultivation efforts.

Well-planned "showers" of direct mail advertising have been amazingly successful in bringing forth results.

For example, one company increased sales 3 1/4 times through a direct mail campaign.

Another received 2,000 orders from a mailing designed to move 400 boxes of merchandise.

These are the kind of showers and flowers that any business needs. Call on us to help you in the rainmaking.

Some simple but effective copy for direct mail promotion used by Rylander Company, Chicago

This fact suggests a new use for the time of the salesman who has found many of his regular customers out of the market at present. It is hard work, but if the salesman will make himself a new list and work on it as he did on the one he used when he started selling, he will soon find himself building a list of customers just as he did when he started.

#### **Building New List**

And, in the process of building, don't forget, as the Printing Industry of America points out in its selling course, that the first five minutes with a prospect are often the most decisive in the entire range of your contacts with him.

If those five minutes make a favorable impression on the prospect, they may open the way to a valuable account. On the other hand an unfavorable impression made in those five minutes may kill your chances with that account forever. However, you cannot expect any text to supply exact instructions as to a method of procedure. It is up to you to do your own thinking about the right handling of any specific case.

Remember that when a prospect sees you for the first time he gets one of two impressions of you.

Either he feels that you can be of use to him or he concludes that he is wasting time in talking to you. It is your job to make him feel that every interview he gives you will be to his advantage.

It may be that you have given him that impression by careful preparation for the first interview. It may be that you have stated your case so well that he is ready to let you go further into his problems than is possible during the first interview. Or it may be that you have tuned in his personality just as you tune in a favorite radio station and he has come to like you, just as you like the radio station.

#### **How to Get Results**

In any event, as you start on your list of prospects, don't forget to look for some positive results of your early interviews. Here is a good list. Make sure that each of your interviews brings one of these results.

1. A signed order.
2. Either full specifications or sufficient data about a given job to enable you to prepare a proposal.
3. A fixed appointment for a return call.
4. A request from the prospect to come back at some specified date.
5. An invitation to keep in touch with him.
6. Information as to what printing is contemplated and when.
7. A promise by the prospect to call you the next time he has an order in your line of printing.

After all, you have learned how to sell in the years you have been at it. Now review what you know and try again. You may find the going a little slower at first but don't let that worry you. Selling is the same old story it has always been, and there will be plenty of business when the country gets squared away on a full war production basis.

Just watch how things jump. Follow up the fellow who needs printing with advice as to how to buy it from you to the best advantage. Printing is an essential industry.

## **Tricks of the Trade**

A very dear friend of mine told me he would let me in on a secret. I said that would be the end of its being a secret if he told me. If it is something good that the other fellow should know, I want to let him in on it. "If you have a nick or a hole in those large types, instead of using wax to fill them up, try some chewing gum." He tells me it sticks longer and prints as well.—Joseph Kovec

# the PRESSROOM

Questions will also be answered by mail if accompanied by a stamped envelope. Answers will be kept confidential upon request

## PRINTING ON PLASTIC CARDS

One of our customers is in the business of manufacturing small plastic calendar cards for advertising purposes. At the present time he obtains this plastic with a mat finish, then prints on this plastic on both sides. In order to obtain a gloss over the entire surface, he varnishes it. The card is then die-cut. This customer has also tried printing on a glossy surface plastic without very good results. He has asked us to determine for him if there is a process by which he could print on the mat-finish plastic and then in some manner obtain a highly glossy finish over this printed surface, which should be flexible. Of course, the usual difficulties should be minimized, such as the problems of drying. We would appreciate any suggestions.

Two possible answers suggest themselves. Using high gloss ink, the print could be made on mat plastic, giving high gloss print on a mat ground, or a reverse plate could be used to print in high gloss ink on a mat ground, with the lettering mat and surrounded by high gloss print. By either method the varnishing step is avoided. Do not attempt either of these two or other makeshifts without consulting your inkmaker, because various plastics require different inks.

Various processes differ in suitability for printing on different plastics. On a large scale, rotogravure is used. On a smaller scale, the silk screen process has advantages. Again, aniline process is sometimes employed as well as regular letterpress. Offset-lith is used to print plastic playing cards. Plastics come in various thicknesses from .04 to .08 mil to .010- to .125-inch, which also influences the choice of printing process.

On a large scale (say 500,000 calendar cards) printing is done on transparent mat-surfaced plastic with special ink. Over-lamination with clear stock yields a product completely transparent, since the surface welds uniformly to the overlay, which is given a glossy sheen

in the heat with pressure lamination. Some cold laminating also is done.

Another method which may interest you, is to *spray* a special composition over a print on mat plastic. This method is used on lithographed plastic playing cards. We are sending you names of manufacturers of plastics used for calendar cards and of inkmakers who specialize in suitable inks.

## ADVERTISING PAINT PADDLES

We have a customer who wishes to have paint paddles made with his advertising copy on them. The material to be used is soft, light wood. We have an old press available for this job. Could it be adapted to this use? Also, what kind of type is used for printing on wood, and can a die be made to cut the paddles to shape after the printing has been done? Probably from ten to twelve paddles could be printed at a time.

The producer of paint paddles for the leading manufacturers in this field has designed special equipment for cutting and sanding the wood used to make rulers and yardsticks. He utilizes the scrap pieces to make paint paddles which are printed singly. He considers it impracticable to print and die-cut or stamp out a number up, with the wood of the thickness he uses. However, our best suggestion is that you get the current prices on printed paint paddles from two leading producers and then if you still want to produce them, consult the manufacturers of die-cutting equipment and supplies and printing presses about the practicability of cutting the paddles out a number up.

The adaptation of your old press to this work would depend upon its condition. While it carries a respected name, its manufacture was discontinued many years ago. The printing for short runs may be done with regular hard foundry type but for long runs steel type is used.

## PRINTING ON SUPER PAPERS

We would appreciate some hints on what can be done to snap up halftone prints on super papers.

Much depends on the choice of paper. Some supers are so lacking in opacity that the halftones on one side show through enough to gray the other side of the sheet, which destroys contrast. Other supers are definitely gray instead of white to start with. Ample toner in a halftone black is an aid to the ink.

Some supers show a mottled print caused by high spots being polished more in calendering than the low ones. Frequently a dull ink is preferable for such a sheet since it decreases the mottled effect by removing the glossy appearance of the high spots.

## SCRATCHPAD MACHINE

We have in mind a scratchpad in size, say 6 by 8½ inches. There is said to be on the market a machine for the fully automatic production of such pads, including ruling on both sides of the paper (probably from roll and cut to size after ruling), bundling a pad of ¼-inch thickness, lining it with chipboard in the back, wire stitching top edge, and application of a top edge paper strip—the sheets to be perforated below the stitch for tearing off after use. Pad sizes, of course, are variable. Can you possibly locate for us the manufacturer of such a combined machine?

We have no information on such a machine. Some very productive machines are never put on the market, for obvious reasons. One is that it would be more profitable to make a few of such machines for one's own use and dominate the market for scratchpads than to sell a few machines and produce strong competition from them.

All the steps in the production of scratchpads are individually mechanized, starting in the paper mill. Since penetrating glue has been developed for snap-out forms, the wire stitching step in scratchpads may be

eliminated. If you eliminate the top edge paper strip, which is unnecessary, the remaining steps are practically the same as those in snap-out form production except that there is no type printing. Any plant equipped for snap-out can economically produce scratchpads.

As scratchpads may be produced as a by-product of thousands of printing plants, it is clear that the combination machine you ask about would have a very limited market.

#### WEB PRESS REGISTER CONTROLS

We would appreciate it if you could give us the name of a manufacturer who makes an open-end web guide designed for operation on rolls of any width and any weight up to about 350 pounds. We are being plagued with rolls for our rotary presses (Models A and B) that are telescoped as much as two or three inches in some places. We need a device that will maintain a side register tolerance of plus or minus .010 if that is possible. We are familiar with one open-end web guide but it is too small for our use.

We have sent names of several manufacturers of web register control. By writing to them you will obtain a good picture of this electronic device which is finding wide acceptance as the standard rotary press equipment.

#### EQUIPMENT FOR BUSINESS FORMS

While we have both letterpress and offset equipment in our plant, in considering production of continuous and snap-out business forms and also salesbooks we are wondering whether there is any single equipment unit which can economically produce these items.

Snap-out forms and salesbooks are printed on both sheet-fed and roll-fed presses of every description, but continuous forms (fan-fold, zig-zag) are printed on the roll-fed presses and rotary equipment to collate is standard. However, the same roll-fed equipment may be used to produce continuous forms, snap-out forms, and salesbooks. Supplementary equipment varies according to kind of press used to print.

#### COPPER PREFERRED TO ZINC

Is it better to have halftones photoengraved on copper than on zinc?

Copper is preferred for this purpose because it can hold a finer line and dot. Before World War I some nice halftone work was produced in Europe on rolled, ground, and polished (buffed) zinc marketed by a Berlin firm.

#### WRINKLES IN BORDER

Previous to our present large run order we had run the enclosed form two-up but in order to effect press-time economy we had the form set four-up. Our pressman is unable to run the job due to wrinkling of the sheet, as is apparent on sample. We tried to run this on a job cylinder press and though our pressman has had many years of background on all makes of cylinder presses and tried each trick he knew, he was unable to do this work.

At times atmospheric conditions are responsible for sheets with wavy edges, or with tight edges and belled centers, whose performance on the press produces wrinkles in spite of all the pressman can do until the unlevel sheets have been seasoned so that they will lie flat.

If the foregoing is not the cause of the trouble, for wrinkles in border near the rear edge take the following precautions: Presuming that the bed bearers are the correct height, make sure the three cuts on wood bases and the six 12-point-face rules are level and type-high by test-

ing the nine units at both ends and at points between with a type-high gauge. The two large heading cuts appear to be lower on the bottom than on the top edge. In open panel form printing it is important that the form be level in all its units and that the cylinder packing be kept as nearly uniform in thickness as possible, without high and low spots, so as to nearly parallel the level form. This is possible only when the start is a level and type-high form. The face of the cuts and the bottoms of the wooden bases must be level.

Make sure the heavy rules are not binding and that all nine units of the form are firmly seated on the bed of the press without springing.

Make ready with the fewest patches of thin tissue which are possible with a level and type-high form. The brush and the bands should be set a bit tighter in the center than on the ends, with pressure tapering off toward the ends in order to iron out the sheet.

The sheet being printed should not be more than .004-inch above the

## Storing Rubber Plates

We have purchased a rubber plate making machine and would appreciate receiving your valued opinion on the best and simplest method of filing matrices and rubber plates for future use. We lock up as many as eight or ten different jobs in the chase. At the present time we are filing our rubber plates alphabetically but we find a great deal of time is wasted in looking up the plates for repeat jobs.

The key of a filing system is a card index of customers in alphabetical order. Ledger index bristol withstands handling longest. Each customer's card or cards should carry his name, address, telephone number, and any other data you consider necessary. As each order is received, the customer's order number and yours covering the job, together with the date the job was received and delivered, should be typed on the card. Also typed on the card should be the customer's number in proof book, his matrix bin number, and his rubber plate bin number.

The bins for the matrices may be of cardboard. The number depends on the number of plates per customer; a big customer might need one or more bins, while for occasional customers one bin might serve for two or more. When the matrix is stored in the bin, the customer's and your order number,

with date, should be stamped on reverse side.

Metal storage bins are preferred for rubber plates and the same identification data used on matrices can be stamped on the cloth on reverse of the rubber plate.

Proofs of all plates are kept in a proof book or books, arranged alphabetically according to the customers' names. The proof of each job should carry the customer's and your order numbers and date and number of the customer's matrix and rubber plate bins.

This simple setup works very well. If you prefer the adjustable metal bins for both matrices and plates, consult your stationer.

The key card index, the bins, and the proof book should be kept up to date. This means that at regular intervals, say every six months, all "dead" cards should be removed from the index and at the same time the corresponding items discarded from bins and proof book.

If a live customer orders new plates from time to time and stops using old ones, ask him if he is through with them so that you may remove corresponding items from the bins and proof book and so save space.

It is up to each firm to work out the best way to store the matrices and plates.

cylinder bearers. The foregoing are the principal points to watch when wrinkles show in borders near the rear edge of the sheet.

It will be seen that the three basic requirements are level form, level sheet, and level printing lines around the cylinder together with a type-high form and a top drawsheet of the proper height to synchronize in travel with the form. This is simple enough if the sheets of paper are nearly level enough for good performance on the press.

If the paper has wavy edges, strips of 4- or 5-ply card, about  $\frac{1}{2}$ -inch wide and 3 inches long, may be pasted on the top drawsheet in the outside margins on the side of the panel that wrinkles and extending about  $\frac{1}{2}$ -inch beyond impression toward the rear end of sheet with the purpose of forcing the wrinkle into the margin. This makeshift is not ideal for close register as variation in side register and margins may result when it is used.

When the edges of sheets are tight with a bellied center in the sheet, it sometimes helps to cut away some of the packing inside of the panels to allow the belly to sink into the cavities.

#### WHEN ROLLERS ARE SET TOO LOW

Our trouble is that after the rollers get warmed up by friction with vibrators, plate, and form, the ink seems to lose body and does not stick to the halftones. Is there any way to avoid this heating up?

If the rollers are set too low in relation to the form and too tight against vibrators, friction is accelerated so that there is a separation of pigment from varnish and printing thereafter is largely with varnish instead of ink. Pigment, dryer, dirt, and dust together form a felt-like film on the rollers which prevents them from functioning properly. Guard against this and your trouble will disappear.

#### STUDDED TYMPANS CHECK STATIC

Some pressmen have noted that when the regular makeshifts long used to combat static (such as gummed paper on the strippers and tinsel of aluminum or copper on the cross rods) fail, relief is often obtained by carrying a top sheet of studded tympan such as Aloxite or Spherekote which allows air to get between the top sheet and the sheet being printed. Some have used cotton sheeting as top sheet for the same purpose after making ready so as to allow for the unusual top sheet.

#### COLLOTYPE PROCEDURE

We would be interested to know whether in your country they are still making the matrix, putting the gelatin on the glass plate, or if they succeeded in adhering the gelatin on the zinc plate, printing in either the direct or indirect offset way.

Collotype is printed both ways in this country, that is, by direct printing and via the offset press. Aluminum plates, dry grained to hold the emulsion, are used for this process. They may be used over and over again because after a job is finished, the used plate is freed of emulsion by soaking it off. The plate is cleaned and again coated for another job.

#### SPRAY PRINTING

We take the liberty of submitting for your consideration the attached copy of an inquiry we have received on spray printing. Your comments, suggestions, and references will be very much appreciated. "We create designs in a form which can be used by newspaper printing presses and other publishing mediums. As is well known, color is an important accessory for advertising display but at the present time any extra color requires an extra run of the press and practically doubles the cost. We wonder whether it would not be advisable to spray or squirt a colored figure on the paper through a suitable mask, this operation to be carried out immediately after printing. We believe that colored bubbles, Easter eggs, snowflakes, or other simple shapes would have a tremendous eye-appeal to the reader with little extra cost. The gadget we are considering must be simple and be attached to the normal newspaper type printing press.

"Will you please indicate whether there is in the literature any record of this principle being used, and if there is a simple mechanism developed which would supply squirts of sprayed ink at 300-600 shots a minute. For high speed presses the spray would have to make that many squirts per minute or some form of shutter would have to be used allowing bursts of spray."

The air brush suggested the spray gun, used in the printing industry as an anti-offset device since about 1907. About the same time similar means were employed by manufacturing stationers and others to border cards uniformly on four edges, which work had formerly consisted of first fanning out the edges, two at a time, and then painting the border with a brush. Whether this idea could be developed into a substitute for the present method of using color in newspapers can best be determined by the manufacturers of the current high-speed newspaper presses equipped to print in black

and color, and the manufacturers of spray guns which are currently being used in printing plants.

#### ECONOMICAL REVERSE PLATES

"I gather that you are always interested in little ideas that may be of special help and value to your readers. Here is something that I feel is unusual and since it will not hurt us to do so, I see no reason why it should not be passed on to the trade.

"Prisms require that the camera be changed to operate at right angles to the copy board, which is not always practicable because of space and time limitations. For some years straight line image reversers have been available. This device accomplishes the same job as a prism except that it fits on the lens and the copy is placed straight in front of the camera in the regular copy board. You can thus make negatives reading left to right on the emulsion side. By using paper negative material you can do photocopy work similar to photostat work. This is mighty handy where you are in a town without this service available, both for your own use and also as a source of extra revenue. It is right handy for making reverse spots to paste up on art work and so on.

"While I understand that some of these devices run into hundreds of dollars, ours cost only \$22.50 postpaid. I am not too sharp on optics and technical data, and so cannot give a full report on its uses, but I can say that we tried it on both a 12-inch Goerz and a Wollensack 16-inch lens and we discovered that it worked very well."

#### INTERESTED IN DESIGN AND LAYOUT

I am sending you three folders, two of these printed in colors on uncoated paper, employing halftones and line etchings, and the third illustrated with three-color prints and text in black ink on enameled book paper. The last I consider the best—probably also the costliest. Am I right? Would it be possible to print the three-color process folder about "as is" on non-glossy (smooth) coated paper and yet retain the color effects clearly? If the deep blue skies in the pictures were lightened, wouldn't the pictures have been much better than they are?

The sky in the two outdoor scenes is too deep a blue and could be lightened to advantage. This three-color folder is the best because of the process itself and the coated paper which was designed for the best of halftone printing in either black or colors. People are constantly attempting to produce halftone and

process printing on other than the coated paper in hope of obtaining the effect produced on coated paper. Some interesting work is done, it is true, but a match is never attained because coated paper shows up half-tones and colors as can no other paper so far made.

It is true that attractive effects are produced with halftones on dull and semi-dull coated papers. Visit the paper dealers and ask them to show samples of prints on these papers, many of which suggest gravure or collotype although printed letterpress.

However, the effect is softer and less contrasty than obtained on slick paper because the transparent colored inks are helped by the superior reflectance of enameled coated paper. On the other hand, reading is easier on the eyes with dull coated and its cost is nearer to that of uncoated paper. Charming effects are possible in a single color of ink on India and other tints of dull coated.

By the way, you may notice a weakness of tricolor process in the folder you prefer. It was necessary to print the text in a good halftone black ink which made the tricolor job in the end a four-color job. Here again is shown the value of a two-color press. This job on a single press requires sheet to go through the press four times when it can be done in two trips through on a two-color press.

#### MAGNET PULLS OUT STEEL RULES

A customer has asked us for some information about an item new to us. It is an electro-magnet which the customer states is used for passing over forms to draw out all of the steel rules. As we have no information regarding this equipment, we are unable to give you a very good description but perhaps from the above you can advise us where such a device can be secured.

This use for a magnet will be news to many, as it was to some of the principal producers of cartons and boxes who concede it may be practicable and economical. We are referring you to source of reliable information on this innovation.

#### TAG STRINGING AND KNOTTING

Can you tell us the address of a firm manufacturing machines for inserting and tying a string, similar to the sample enclosed?

Automatic machines which punch holes in cards, tags, booklets, and such, and also insert strings and knot them, have become standard bindery equipment in the past few years. We are sending you a list of such suppliers.

## West Germany Show



A scene from the Drupa International Printing and Paper Fair in Dusseldorf, Germany, which attracted approximately 300,000 visitors before it closed June 10. Visitors from this country pronounced show well presented and impressive, featuring light equipment

#### SPILLER VISITS DRUPA

On his return in mid-June from a flying trip to Europe, W. R. Spiller, chief engineer of Harris-Seybold Company, conveyed highlights of his impressions of the Drupa exposition and conditions in graphic arts industries as he observed them in West Germany and other continental centers. Drupa, held in Dusseldorf, was the first large post-war display of graphic arts machinery manufactured in West Germany and the other European nations outside the Iron Curtain. Close to 350 equipment manufacturers were represented in the exhibit, including forty from outside West Germany.

Mr. Spiller found most of the equipment comparatively small and light in construction, to save material costs, since lack of capital is the major problem of the European printer. Engineers emphasized simplicity in design to cut costs, giving considerable attention to appearance—competition being strong for the limited market there. (Eleven cutters and six offset presses were shown by the West Germans alone, as compared with the four cutters and four offset presses exhibited at the National Graphic Arts Exposition in Chicago last fall.)

The Drupa exhibits were well presented and quite impressive, according to Mr. Spiller. It is expected that the exhibition will be held regularly, the next one probably in 1954.

#### HOE PLANT VACATION

R. Hoe & Company has announced that its plant will be closed for employees' vacations on July 23, opening again on August 6. During the vacation period no shipments will be made except to meet extreme emergencies, and no deliveries will be accepted.

The company states that this plan is in keeping with the trend in the machinery and heavy tool industry, and believes that it makes for a more efficient manufacturing program than the staggered vacation system which formerly was in effect.

#### SOUTHWORTH PROMOTIONS

Ray H. Houghton has been promoted from vice-president to president of Southworth Machine Company, Portland, Maine. Mr. Houghton succeeds Melville C. Cole, now chairman of the board. Robert Colomby has been named manager of the graphic arts division of the company, now in its fifty-fourth year.

# OFFSET

## Characteristics of Offset Inks

By Charles F. King

★ THE PRINTER who has recently purchased offset equipment wonders about the differences between offset and letterpress inks. Many of those who have operated combination shops for years know that the same inks are not suitable for both processes but know little about the reasons why. Also, straight lithographic shops are often puzzled over the problem of matching with offset inks a job which previously had been run letterpress. There are many "tales" in circulation throughout the industry concerning these differences, some of which are not accurate, others of which are only half true, and still others that appear to have arisen from lithographers' inability to satisfy a former letterpress customer.

### Composition of Ink

Offset inks are different for two reasons: They must come in contact with and react with the water fountain solution. They must affect the plate in such a manner that the printing and non-printing areas will be maintained in their original relationship to each other. Although this latter function is usually considered to be more closely related to fountain water control, ink plays an important part therein. A third difference between the two types of inks is generally included in such discussion: Offset inks are usually stronger than letterpress inks. The usual reason given for this is said to be that since the ink is transferred from a rubber blanket rather than directly from the printing form, a much thinner film is carried to the paper. Although the blanket does affect the shade of the printed color, it is very doubtful if the above reason has anything to do with it.

In order to discuss the differences between the two inks, it is first necessary to understand something about the composition of an ink. Generally speaking, both letterpress and offset inks are composed of two phases or parts: the pigment por-

tion and the vehicle. The pigments are finely dispersed particles of color together with whatever white pigments are necessary to impart the correct color strength, transparency or opacity, or other printing characteristics. The vehicle portion carries the pigment through the press distribution system, to the plate and blanket (in the case of offset), and transfers it to the paper or other surface to be printed. It then acts as a binder to hold the pigment on this surface. Many of the same pigments may be used equally well in inks for either process and many of the materials used in formulating the vehicles are identical. However, the reactions which take place on an offset press make many of the materials available for the formulation of letterpress inks unsuitable for offset.

One of the first considerations which the offset ink formulator must take into account is the effect of water or fountain solution on the pigment. A pigment differs from a dye by virtue of the fact that it does not dissolve in the media used to apply it. Although the pigment may be insoluble in the printing ink vehicle it may dissolve in water. When such a pigment becomes incorporated into an offset ink it causes an all-over wash or tint on the water-wet portions of the plate. This transfers to the blanket and in turn to the paper.

### Pigment Reactions Vary

Since the inkmakers seldom know what chemicals are to be used in the fountain solutions with which their inks must react, their problems are further complicated. Some pigments will dissolve in strongly acid solution but will not in fairly neutral solutions. Others will react in just the opposite manner. There are some instances where the acid will even destroy the color of the pigment. In other cases it is the composition of the acid rather than its strength which will cause the pigment to dissolve or "bleed." This means that

although an ink may work well with a certain formula for a fountain acid, it may show a bleed or wash when another formula is used, even though the solutions may have exactly the same acidity or pH value. Of course, in letterpress no consideration is given to the effect of water or acid (except where the finished print may be affected by them), and as a result many of the types and shades of pigment available for making letterpress inks cannot be used for offset.

### Types of Wettability

Another property of pigments which determines their suitability for use in offset inks is their wettability. In both lithographic and letterpress inks it is desirable to have the pigment thoroughly wetted by the vehicle. If it is not possible to thoroughly wet or disperse a color, it will tend to pile on the printing form or on the plate and blanket. In offset lithography the pigment must be more thoroughly dispersed than in letterpress printing. Although it is desirable even in letterpress to have the ink ground as finely as possible, inks which will work satisfactorily in that process may tend to pile if run on an offset press.

Another type of wettability which must be considered in making lithographic inks is "preferential wettability." Just as bi-metal and tri-metal plates owe their lithographic stability to the fact that some metals are more easily wet by water than by ink vehicles while others are more easily wetted by the ink, in the same manner some pigments are more easily wetted by water than they are by the vehicle. By surface treatment and other means it is possible to alter this property of a pigment in much the same manner as it is possible to make one portion of a zinc plate ink-receptive and another portion water-receptive.

It is because of this property of preferential wettability of pigments that a terrible misunderstanding

has arisen among lithographic pressmen. There are many who firmly believe that it is impossible to run inks which contain opaque white pigments. In fact, some will go so far as to say that it is impossible to run any type of opaque ink satisfactorily on an offset press. These men are either old-timers or have been told this by old-time pressmen who learned their trade before satisfactory means of surface treatment of these opaque pigments had been developed. Today inkmakers are in the position to supply opaque colors and tints which will work just as well on an offset press as transparent colors and tints will.

Speaking of tints, lithographers bring many of their ink troubles on themselves. It is customary for many pressmen to match colors from certain standard colors which they keep in stock. When a job comes into the shop which requires a very light tint or pastel shade they make the ink by adding laketine to one or more of their standard colors until they reach the desired shade. The addition of laketine in excessive amounts invariably brings on troubles on the press. Plates may scum or go blind or both at the same time and roller stripping is common. There are other extenders which will give much better press performance than laketine. In many instances it will be found that an opaque offset white will give a much better effect than a transparent one. If pressmen would only realize that laketine contains water they would not use it as freely as they do.

#### "Grease" and Water Mix

Twenty or more years ago the differences between the vehicle phases of letterpress and offset inks were not as great as they are today. In those days most letterpress inks were made from linseed oil varnishes and although it was customary to use slightly heavier bodied varnishes in offset inks, they, too, were made from straight heat bodied linseed oil. The introduction of synthetic resin varnishes has had a tremendous effect on the letterpress field. Fast drying inks, gloss inks, heat-set inks, and steam-set inks all have been made possible through the use of synthetic resin vehicles. It is obvious that it would be impossible to use an ink such as a steam set, where the presence of moisture causes the ink to dry, on an offset press. But the presence of moisture on a lithographic plate is not the only factor which must be considered in selecting materials to be

used in the ink vehicle. The use of a rubber blanket necessitates that varnishes be used which will have the least possible deteriorating effect on the rubber.

Although the lithographic process was supposedly developed on the theory that "grease and water will not mix," nothing could be further from the truth. If grease, as represented by the ink vehicle, does not mix with water it is impossible to print lithographically. By experience, inkmakers have learned that it is possible to make an ink that is too water-resistant or water-repellent to work on an offset press. Strange as it may seem, a pressman will normally describe this ink as "not being greasy enough." With such an ink the work areas of the plate will tend to go blind even though the acidity of the water is greatly reduced.

It therefore appears that this ability of an offset ink to take on

water up to a certain point is one of its most important properties. In fact, some fifteen years or more ago there were some claims made concerning a new so-called "dry offset" process which depended upon certain materials which would pick up moisture from the air being incorporated into the ink. Since the ink on the distribution system of the press would remove moisture from the air and incorporate it into the ink there was no necessity for a water fountain or dampers. Some success was claimed for this method of operation. More recently a manufacturer of duplicating machines which operate on the lithographic principle, has found that it is possible to print successfully by placing the dampers in contact with the rolls rather than the plate.

Many lithographers are under the impression that in order for an offset ink to work well it must be very stiff and tacky. Some pressmen of the old school thought that an ink was no good unless it was so stiff that they were required to use a can opener and actually cut the can away from the ink. These men would use a rolling pin or baseball bat to work the drier and compound into the ink. Thinking on this subject has changed quite a bit in the past few years, and it is not unusual to find offset inks running successfully with tack readings (as indicated by the Lithographic Technical Foundation Inkometer) considerably lower than letterpress inks.

#### Stiff Ink Not Necessary

Apparently there were three reasons why the old-timers considered stiff tacky inks to be necessary. First, a stiff ink was considered to be less greasy, with less tendency to wet the non-printing area of the plate. Second, the lithographer was always looking for the strongest inks he could find, and the more pigment that could be crowded into the vehicle, the stronger and stiffer the ink. Third, when the water mixed with the ink, the tack was reduced to a point where poor transfer was the result.

In time, however, a substantial amount of lost material has accumulated and is worth digging out. A slack work day can be put to real advantage by cleaning out the unswept corners and the dark crevices around the stones and in the machinery. Let the operators take a wire or screwdriver and do a little probing into that dark cavity under the left-hand vise jaw; it takes time but some mats will eventually stow away there. Even if the clean-up doesn't pay its own way, it improves the appearance of the shop, and whatever is found and sorted out may save hours of time later. Many is the day that "for want of a nail, the shoe was lost, the horse was lost," and the printer lost more than he made.

By Stanton R. Gaylord

(Turn to page 75)

## Money On The Floor

There is more money on the floors and under the stones in some print shops than there is in the cash drawer. Not to mention spilled oil, gasoline, and all types of cleaning fluid which, through carelessness, are lost and gone forever, there are pounds of slugs, leads, type, and stereotype metal hidden wherever it is dark or difficult to get at. In spite of the sharp eyes of the operator, matrices sometimes leap into the air and disappear into nowhere. Pins and fingers wander from their box near the presses and just fade away. Even a good make-up rule will take a notion to hide itself indefinitely, and pica poles or line gauges have been known to lose their way and are never heard from again. Because time is so precious, the universal rule seems to be, "Out of sight, out of mind."

In time, however, a substantial amount of lost material has accumulated and is worth digging out. A slack work day can be put to real advantage by cleaning out the unswept corners and the dark crevices around the stones and in the machinery. Let the operators take a wire or screwdriver and do a little probing into that dark cavity under the left-hand vise jaw; it takes time but some mats will eventually stow away there. Even if the clean-up doesn't pay its own way, it improves the appearance of the shop, and whatever is found and sorted out may save hours of time later. Many is the day that "for want of a nail, the shoe was lost, the horse was lost," and the printer lost more than he made.

#### GRAVURE RESEARCH OFFICERS

M. J. Tiernan, Art Gravure Corporation of Ohio, was elected president of Gravure Research, Incorporated, at the fourth annual meeting of the organization in Columbus, Ohio, on May 15. Robert Simpson, C. T. Dearing Company, was elected first vice-president; George A. Preucil, Chicago Rotoprint Company, second vice-president; T. J. Schultz, Parade Publications, secretary-treasurer; and J. Homer Winkler, International Craftsmen officer and Battelle Institute consultant, assistant secretary.

The group decided to concentrate research during the coming year on the processing of carbon tissue and on etching operations. Gravure Research, Incorporated, is an organization of eighteen firms subscribed to the advancement and perfection of rotogravure printing.

#### PRIVATE PLANT SURVEY

J. W. Rockefeller, Jr., and Associates, consulting engineers, are undertaking a survey to determine the place of new equipment in the future of the printing industry as it applies particularly to the average commercial printer. In the opinion of the above firm, the answer to the threat of private printing plants lies in commercial printing know-how together with improved equipment. The firm proposes to send direct to all printers answering the questionnaire a tabulation of all results received. Questionnaires may be obtained by writing to the above firm, located at 140 Cedar Street, New York 6.

#### ON-THE-JOB TRAINING PLAN

An "On-the-Job Training" plan, aimed at developing and maintaining skilled craftsmen, has been completed by the Lithographic Technical Foundation. The course requires neither classes nor trained instructors and has been prepared by educators as well as lithographic authorities. Each course is contained in two packets, one for the student and one for the supervisor. Explicit instructions on job sheets are furnished the supervisor. The study guide summarizes each unit of the text and questions the student. Progress tests measure the student's progress. Seventeen courses are presently available. Cost of each self-contained course is \$9.50 for the self-teaching kit and \$7.00 for the supervisor's kit. Further information can be obtained from the LTF at 131 East 39th Street, New York 16.

#### FOX RIVER PACKET

"A New Twist to the Old Yule Tale" is the title of a packet of sales suggestions for holiday printing presented by Fox River Paper Corporation, Appleton, Wisconsin. The free booklet contains specimens on such cotton fiber papers as wedding, onion skin, cotton fiber bond, and wedding Bristol, as well as ideas for letters, folders, and cards.



#### ATAA SETS CONVENTION DATE

Advertising Typographers Association of America will observe its silver anniversary with this year's convention, set for Havana, Cuba, October 23-26. Headquarters will be Hotel Nacional.

E. M. Diamant, of New York, chairman of the convention committee, promises an outstanding meeting to celebrate the organization's twenty-fifth birthday. Other members of the committee are Carl H. Ford, Cincinnati; Harry O. Kovats, of Chicago; Kurt H. Volk, of New York; Jerry Singleton, executive secretary, ATAA.

#### NEW FEDERATED DEPARTMENT

Federated Metals Division, American Smelting and Refining Company, has organized a new department for the exclusive handling of its type metal business in the Eastern territory. William H. Pollock, formerly with the Imperial Type Metal Company, will be manager.

#### NEW YORK ELECTIONS

New York Employing Printers Association has elected the following officers to serve during the year 1951-52.

The president is William H. Walling (Rogers-Kellogg-Stillson); vice-president, Peter F. Mallon (Peter F. Mallon, Incorporated); the secretary was reelected, Peter Forsman (C. H. Forsman Company); treasurer, Mrs. F. W. Shaefer (Tri-Arts Press).

Don H. Taylor continues as executive vice-president.

Other vice-presidents are Francis N. Ehrenberg (of Blanchard Press), president of the Association's Printers League Section, and Frederick Haedrich (New York Label and Box Corporation), president of the Master Printers Section.

#### KIMBERLY-CLARK CAMPAIGN

Kimberly-Clark Corporation has begun a new "service" advertising campaign in THE INLAND PRINTER, and in other printing trade publications. Termed an Idea Exchange, each advertisement will include ideas of interest to printers—creative selling, solutions of press problems, and the like. A \$50 Defense Bond will be awarded for every item published; printers, inkmakers, advertisers, and printing salesmen are encouraged to participate.

A panel of experts—including Wayne V. Harsha, editor of THE INLAND PRINTER—will select the bond-winning contributions. The campaign is designed to stimulate an exchange of printing information and provide service to the graphic arts industry. Contributions should be sent to the Idea Exchange Panel, Kimberly-Clark Corporation, Neenah, Wisconsin.

#### RESEARCH COUNCIL MEETS

At a special meeting of the executive committee on May 18 of the Research and Engineering Council of the Graphic Arts Industry, two new officers were named. Joseph Schwartz, Westcott and Thompson, Philadelphia, was elected treasurer; and John Davis, Jr., Judd and Detweiler, Washington, was appointed vice-president as well as the chairman of the publications committee.

The latter committee announced that four additional inserts will be published as part of Volume II of the Council's Research and Operations Manual: Static Electricity; Transparent Proofs (as prepared within the Government Printing Office); Proper Care and Use of Printers' Rollers; and Paper Handling Methods. The volume is available to anyone in the graphic arts at a subscription price of \$20.

Frank F. Pfeiffer, of Reynolds and Reynolds Company, in Dayton, Ohio, president of the Council, will announce the place and time of the organization's annual meeting at a future time.

#### IRON AND STEEL SCRAP

Inventories of heavy industrial iron and steel scrap have fallen dangerously low during the last four months. Supplies have been fluctuating between days and only a few weeks as compared with normal, safe-working inventories of about sixty days.

The National Production Authority is conducting a special program to seek out dormant scrap and place it in normal channels as quickly as possible. Quick action can save the steel industry from a prolonged and critical scrap shortage.

The Eastman Kodak Company, during a World War II scrap drive, found eighty-eight carloads of dormant scrap around its plants within a three-month period. Ever since that experience, the Eastman Company has been alert to remove obsolete equipment from inventory on a regular basis.

#### MERIT AWARD COMPETITION

Nation-wide recognition for the important job that improved lighting is doing to help the nation's defense efforts is one of the aims of the fourth International Lighting Exposition and Conference, to be held next year at Cleveland, Ohio, May 6 to 9. A \$2500 merit award competition will be held at the time of the exposition for outstanding lighting installations. There will be twenty-five gold seal awards and additional merit award certificates. Requests for application blanks and copies of official rule booklets should be addressed to: Merit Award Competition, Fourth International Lighting Exposition and Conference, 326 W. Madison Street, Chicago 6, Illinois.

#### BRUCE ROGERS SCHOLARSHIPS

The American Institute of Graphic Arts has sponsored a plan of issuing yearly cash scholarships to selected students of printing by means of a Bruce Rogers Educational Fund. The fund, set up by contributions from individuals and firms in the industry, was started at the suggestion of AIGA to honor the famed designer on his eightieth birthday in 1950.

The first four students to receive the scholarships were announced at the 1951 annual meeting of the Institute. Each scholarship consists of \$100 in cash to be used toward expenses for tuition, books, and materials the student requires in his studies.

Scholarship students are selected by an AIGA committee in consultation with Mr. Rogers from names submitted by printing education institutions and schools with printing departments.



This year's AIGA award for distinguished service to the graphic arts went to Harry L. Gage

## Pacific Society of Craftsmen at Phoenix



Standing and smiling at the recent Conference of the Pacific Society of Printing House Craftsmen, left to right: Andy Chuka, general program chairman; Gordon Holmquist, International second vice-president; Howard Wedel, Phoenix Club president; and Fred Snyder, third vice-president, Pacific Society. Seated are Allan Clark, first vice-president; Tom Hislop, president; and Allison Manners, who is past president of Pacific Society

#### OXFORD APPOINTS HOLLAND

Walter W. Holland has been appointed to the newly created post of manager of production at the Rumford mill of the Oxford Paper Company, assistant vice-president T. F. Spear has announced.

Mr. Holland, prominent for many years in the paper industry in Canada, has been general superintendent of the Quebec North Shore Paper Company since 1941. He is chairman of the executive council, technical section, Canadian Pulp and Paper Association.

#### PLANT EXPANSION PROGRAM

Minnesota Mining and Manufacturing Company has announced a \$6,500,000 plant expansion program. Most of the projects, located in ten cities and eight states, are now under way. The firm is expanding facilities at Atlanta; Bristol, Pennsylvania; Buffalo; Cleveland; Lemont, Illinois; Wayne, Michigan; Boston; and Hastings, Hutchinson, and St. Paul, Minnesota. The projects mark the latest step in a long-range building program. The company spent \$47,000,000 for expansion purposes in a five-year period ending in 1950.

#### ESSAY CONTEST WINNERS

Carol Welsh of Broad Ripple High School, Indianapolis, won first prize of \$250 in the essay contest for young women sponsored by the International Graphic Arts Education Association in co-operation with International Printing Ink. Paul Pazell of Tilden Technical High School, Chicago, was the first prize winner in the essay contest for young men. "You and Color Printing" was the subject of the contests which were judged by Harry L. Gage, graphic arts consultant to the Mergenthaler Linotype Company; Robert H. Caffee, president of Print-

ing Industry of America; Dwight Cooke, radio moderator; Mark Ellingson, president of Rochester Institute of Technology; and Allerton H. Jeffries, president of Jeffries Banknote Company.

#### CONTEST JUDGES ANNOUNCED

Judges for the twenty-third annual "Best of Industry" awards competition, sponsored by the Direct Mail Advertising Association, are: C. B. Larrabee, president and publisher of *Printers' Ink*; E. H. Woodley, advertising manager of Northern Electric Company Limited, Montreal; F. N. Merriam, Jr., of McCall Corporation; Raymond A. Sholl, Jr., Raymond A. Sholl and Company; and Raymond Lufkin, consulting art director and designer. Entries will be judged on the basis of effectiveness or results achieved; plan and continuity; copy; and design, layout, and appearance. Entry blanks for the contest are available at DMAA headquarters, 17 East 42nd Street, New York 17.

#### MARATHON PRESS RUN

On a recent press run of *Maclean's Magazine*, published by Maclean-Hunter in Toronto, Canada, a Goss five-and two-color magazine press operated for 14 consecutive hours without a stop. During the run, 110 miles of paper went through the press, printing over 5,500,000 single pages. Fourteen rolls of paper were involved, necessitating thirteen perfect paste-ups in the changing of the rolls.

#### FRANK LESLIE GIFT

Frank Leslie, president of the John Leslie Paper Company, Minneapolis, Minnesota, presented thirty-seven rare books illustrating the history of printing to the University of Minnesota on May 11.

# Robert H. Caffee Speaks at Northwest Regional Conference of PIA



At the speakers table of the Northwest Regional Conference of Printing Industry of America, held recently in Portland—left to right: Otto Smith, president, Master Printers of Oregon; P. B. "Pat" Ness, president of Oregon Printing Industry; Mrs. Ness; Miles J. Sweeney, Sr., Krist & Damm, Portland, master of ceremonies; and Robert H. Caffee, president, Printing Industry of America

## LEE AUGUSTINE HONORED

Lee Augustine, vice-president of the Printing Machinery Company, Cincinnati, Ohio, received the "Outstanding Craftsman" award at the Fifth District Conference of Printing House Craftsmen last month in Indianapolis, Indiana. The selection was based on creative ability, long and distinguished service, and activity in the International as well as district and local Craftsmen activities. Mr. Augustine, widely known as an authority on lock-up and makeready, has a twenty-five-year record of service to Craftsmanship. He won a Distinguished Service Award by the Junior Chamber of Commerce for his work with that group. In 1942 he suggested the International bulletin contest and donated trophies until the International assumed the responsibility at the 1950 convention.

## OREGON PRINTERS' OFFICERS

P. B. Ness, of Stevens-Ness Law Publishing Company, was elected president of the Oregon Printing Industry recently. The other officers are: William Krieger, Schlegel Typesetting Company, vice-president; Warren Deal, Agency Lithograph Company, secretary; and Steven Wilson, Lane-Miles Standish Company, treasurer. Named to the board of directors were B. H. Miller, Kilham Stationery and Printing Company; Arthur Markevitz, Bushong and Company; and Miles Sweeney Jr., Sweeney, Krist and Damm. Glen W. Cruson is the association manager.

## ALEXANDER MURRAY HONORED

Alexander Murray, senior research scientist for the Eastman Kodak Company, has been named the outstanding person in the graphic arts industry by the Technical Association of Graphic Arts Industry. Mr. Murray received the award for his contribution of a long series of improvements in the printing industry. His work on tone reproduction and dot etching problems

was particularly cited. He introduced the densitometer to the engraving field. Born in Greenock, Scotland, Mr. Murray came to the United States at the age of thirteen. He has been granted more than fifty patents covering developments in the graphic arts field.

## RELIANCE PROFITS UP

The Reliance Electric and Engineering Company of Cleveland, Ohio, has reported net earnings of \$904,363—or \$2.16 per common share—for its fiscal half-year ended April 30, 1951, on net sales of \$15,413,918. The firm entered its third quarter with a \$23,500,000. backlog.

## CINCINNATI SUPPLYMEN'S GUILD

The Printers Supplymen's Guild of Cincinnati is arranging for a charter from the International Association of Printing Supplymen's Guild. Lee Augustine, vice-president of the Printing Machinery Company, is president of the new organization. Other officers are: Kenneth N. Cramer, Ideal Roller and Manufacturing Company, first vice-president; William H. Hammett, Miehle Printing Press and Manufacturing Company, second vice-president; George A. Vitt, Wortman Roller Company, took over the duties of secretary and treasurer.

## E. F. HERRLINGER HONORED

Edward F. Herrlinger, chairman of the board of the Gummed Products Company, Troy, Ohio, was congratulated by company representatives on his eightieth birthday and presented with a 2- by 3-foot birthday card. The card was presented to Mr. Herrlinger by his two sons, Roth F. Herrlinger, president and general manager since 1935, and Paul W. Herrlinger, vice-president in charge of production. Edward F. Herrlinger II, son of Roth F. Herrlinger, is assistant sales manager and the fourth member of the family now actively engaged in the company's affairs.

## GRAPHIC ARTS SHOW

"It Can Be Done in New Orleans" was the theme of the annual graphic arts show recently held in the Louisiana city. Some forty firms, representing all branches of the graphic arts and advertising agencies, showed samples of printing. There are 110 printing plants in New Orleans. Sponsors of the show were the Master Printers' Association, the Advertising Club, and the Chamber of Commerce.

## BURCHARD AT CARNEGIE

Kenneth R. Burchard, who has been with American Type Founders since 1944, has been appointed professor and head of the Department of Printing Management at Carnegie Institute of Technology, Pittsburgh, Pennsylvania. Mr. Burchard taught in the printing management department at the Institute from 1940 to 1943. He has succeeded Homer E. Sterling. A practical shop man, Mr. Burchard is a recognized authority in the photomechanical reproduction field.



K. R. Burchard, new head of department of printing management at Carnegie Tech

#### MRO PERCENTAGES RAISED

Quarterly percentage quotas of maintenance, repair, and operating supplies (MRO) were raised 20 per cent by the National Production Authority late in May. This means that MRO materials obtained with a DO-97 rating may now be purchased up to 120 per cent of the average quarterly amount purchased during 1950. (Percentages are based on purchase dollar value.) Formerly, purchases were restricted to 100 per cent of the 1950 base period.

Another clause of the new amendment to NPA Regulation Four eliminates quota restrictions if no more than 20 per cent of the quota amount is bought with a DO-97 rating. If you can confine your DO-97 rating to 20 per cent or less of the purchase amounts represented by your quarterly MRO quota, you may then purchase the remainder of your MRO materials free of any quota restrictions.

The new amendment applies only to MRO and DO-97, and does not change use limitations on specific materials which may be covered by other NPA orders. It also stipulates that DO-97 cannot be used to obtain operating supplies in an amount beyond a sixty-day inventory, or beyond any lesser amount that may be specified in other NPA regulations covering particular materials.

The changes, NPA stated, were designed to correct a situation caused by increases in materials prices since last year. Aim is to permit the purchaser to obtain at least the same volume of MRO materials as he purchased last year. Because of increased prices, 100 per cent restriction meant volume of purchases was reduced.

#### PRINTING PLATE ORDER

National Production Authority Order M-65, "Conservation of Metal in Printing Plates," was issued May 31. The order requires the scrapping of "obsolete" printing plates. "Plate" is defined as "any kind or shape of metal printing or marking plate, cylinder, or metal form, used in the printing process, except such as are composed only of lead, tin, and antimony."

For the purpose of the order, a plate "shall be deemed to be 'obsolete' if, on April 1, 1951, or on the first day of any calendar quarter thereafter, it has been in existence for the period as specified below for the respective type of printing for which it is used and has not been used during such period: Newspaper, magazine, periodical, and container printing—1 year; book printing—4 years; all other categories of printing—2½ years.

The following signed certification is required on all purchase orders on and after July 1, 1951:

*The undersigned certifies, subject to statutory penalties, that the acquisition by the undersigned of the plates or restricted metal herein ordered will not be in violation of NPA Order M-65.*

# Conference in Washington on Defense Problems of Industry

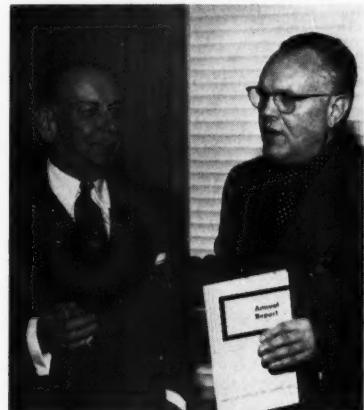
Decisions on basic questions relative to procurement of Government printing by commercial plants, and availability of supplies, were announced following a meeting in Washington on April 30 between Government and military officials and members of the Commercial Printing and Lithographing Industry Advisory Committee of the National Production Authority.

The twenty-eight members of the industry committee are drawn from the ranks of printers representing all processes, a wide range of specialties, and various-sized plants. Government representatives at the meeting included military procurement officers, Congressional committeemen responsible for legislation affecting the printing industry, NPA and GPO officials.

The printing industry representatives told the meeting that commercial plants of the country were ready and able to meet every request made of them to take care of the Government printing needs arising from a surplus of orders which cannot be produced directly by the Government Printing Office. Government officials, in their turn, assured the printers that there was no intention to expand Government printing facilities as long as the commercial industry continued to meet Government needs.

Ten members of the industry committee were appointed as a special task group to make a nation-wide survey of commercial printing facilities in order to provide the GPO with information concerning plant sources for the procurement of any size or kind of Government printing order.

Regarding paper, the industry representatives stated there was no need for an inventory limitation at this time. In their opinion, the paper situation is improving and the supply problem seems to be settling itself.



Walter Dorwin Teague (left), new president of AIGA, with Merle Armitage, retiring president

NPA officials said that with current paper production currently at a rate of 26 million tons annually there should be sufficient stocks for all needs, including Government requirements. It was also stated that allocations of pulp stocks to mills were being considered.

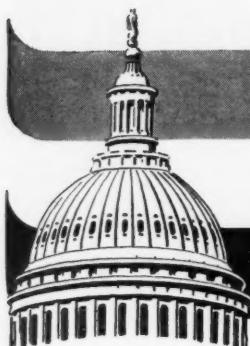
The NPA officials also informed the meeting of metal conservation orders being prepared. These included a plate conservation order aimed at bringing out of storage all plates not earmarked for definite use; restrictions on the gauge of sheet zinc; and general lead tolling arrangements with smelters.

Military officials outlined projected defense printing requirements for the next eighteen months. Total figure of Department of Defense printing volume for the next year and half was estimated at \$117,704,602. About ten per cent of this total will be placed through field offices, and some part of this field percentage is expected to be contracted locally with the commercial printers. Another percentage of Department of Defense printing will be procured by GPO from commercial printers, and still more will go to commercial establishments direct from defense agencies on waiver from GPO. (Printing Industry of America estimates that GPO work currently contracted in the commercial printing field is running at a rate of \$30,000,000 annually, and probably will increase to \$50,000,000 next year.)

Members of the Commercial Printing and Lithographing Industry Advisory Committee, NPA, are:

Peter Becker, Jr., Washington, D.C.; Stephen Harrington, St. Paul; James L. Murphy, New York; Peter W. Reilly, Lowell, Massachusetts; William H. Egan, Dallas; Elmer F. Wagner, Detroit; Arthur R. Hitchings, Chelsea, Massachusetts; Allerton H. Jeffries, Los Angeles; Robert A. Whidden, Boston; Herbert Pillen, of Washington, D.C.; Victor Strauss, New York; Jerome Fisher, New York; Christopher Wrightson, Boston; William H. Walters, Cincinnati; Arthur A. Wetzel, Milwaukee; William M. Winship, New York; A. F. Oakes, New York; Walter M. McArdle, Washington, D.C.; Frank Myers, Cleveland; Lee J. Werden, Philadelphia; William P. Gildea, Baltimore; William F. Cannon, Davenport, Iowa; R. Mort Frayn, Seattle; Robert H. Caffee, Pittsburgh; Theo C. Nevins, Bloomfield, New Jersey; H. N. Cornay, New Orleans; John M. Wolff, Jr., St. Louis; Carl E. Dunigan, Chicago.

Those comprising the survey task committee are Caffee, Cornay, Dunigan, Frayn, Harrington, Hitchings, Jeffries, McArdle, Walters, and Wolff.



# THE GRAPHIC

## \* ARTS IN \*

## WASHINGTON

WITH A COUPLE of major regulations pending in Washington relative to price and materials controls, it is difficult to report on a situation that could change drastically between the time a report is written and the time it appears in print. A big question mark is how the Controlled Materials Plan will be geared to affect the graphic arts. This plan, based on division or allocation to all industry of the basic metals—steel, aluminum, and copper—went into effect July 1. As this was written, no interpretations or regulations pertaining to the graphic arts industries had been announced.

Also pending, and expected to break at any minute, were the additional price regulations specifically drawn up for the printing industry.

Of the newer materials regulations, the one most likely to be retained under the Controlled Materials Plan is M-67 of the National Production Authority pertaining to inventories of standing plates. This order is meant to get out of inventory all printing plates, specifically those of copper, aluminum, zinc, and nickel, which are not earmarked for printing use.

The order directs the remelting of all "obsolete" plates, except those, such as stereotypes, composed only of lead, antimony, and tin. It then goes on to describe what plates are considered obsolete by categories. These categories, and the time periods during which they have not been used which render them obsolete, are as follows:

Magazines and periodicals—one year; books—four years; containers—one year; newspapers—one year; all other categories, which include general job printing—two-and-a-half years.

Date of obsolescence is figured quarterly, beginning April 1, 1951. A magazine photoengraving, for example, in the possession of the printer, and not used since April 1, 1950, is considered obsolete. At the beginning of each quarter, starting April 1, 1951, the printer must check all plates. If a plate has become obsolete he must notify the owner or customer who has jurisdiction over it. If, within thirty days, he does not receive notice that there is a definite use for the plate in prospect, the plate must be scrapped.

Beginning July 1, every order for the purchase of new plates must carry

a certification that the purchaser does not have any obsolete plates in his possession and is complying with the regulation. In other words you cannot buy new plates until you have scrapped those which are termed obsolete under the order. In cases where printing customers are in the habit of issuing platemaking orders to the printer over the phone, or by sending him art work or photos to be plated without a formal written order, each customer of this sort may issue a blanket certification to the printer at the first of each quarter to cover all purchases made in this way. This ruling, obtained from NPA at the special request of Printing Industry of America representatives, avoids a vast amount of record keeping that otherwise would be involved in issuing a certificate with each individual plate order.

A fairly recent order which may be changed or rendered inactive by the Controlled Materials Plan is the one which increases by 20 per cent the amount (figured on the purchase price value) of materials which can be purchased for maintenance, repair, and operating supplies (MRO) with the DO-97 rating. MRO quotas are based on quarterly volume, the base period being the average quarterly amounts purchased in the calendar year 1950, or the last fiscal year ending prior to March 1, 1951.

Purchases of MRO supplies were allowed up to 120 per cent of the base period quantity under this order. Furthermore, if it is possible for you to purchase 80 per cent or more of your MRO supplies without using the DO-97 rating, you are freed entirely from MRO quotas, within the limitations of use and inventory regulations in other NPA orders.

The NPA lead order amendment to M-38, which may possibly be affected by Controlled Materials Plan regulations, exempted this industry generally from use restrictions applying to other industries. Customary tolling arrangements may be continued, and new lead purchased, as long as inventory does not exceed a normal thirty-day supply, or a practicable working inventory, whichever is less.

Outside the field of orders and regulations, a development in Washington was the formation of a Graphic Arts

Equipment Industry Advisory Committee for the National Production Authority. The duty of the committee, as with other advisory groups, is to assist and advise NPA in matters affecting graphic arts equipment in connection with the defense program.

Members of the committee are Edward G. Williams (ATF), Wesley Lee (Challenge), George A. Heintzemann (Dexter), James Campbell (Douthitt), Edward C. Spencer (Harris-Seybold), Joseph L. Auer (Hoe), Harry G. Wilkins (Intertype), Henry Nygren (Nygren-Dahly), A. W. Joyce (Potdevin), Harold T. Simpson (Printing Machinery), J. F. Van Cats (Robertson), and Fred S. Tipson (Sheridan).

### STATUS OF LEAD

The Lead Industry Committee sponsored by the Tin, Lead, and Zinc Divisions of the National Production Authority recently reported lead in short supply and imports below last year's comparable period. This situation, they said, is caused by a greater volume of lead buying by North Atlantic pact nations rebuilding defenses, and by the domestic price situation.

The committee went on record as opposing complete allocation of lead at present. The committee recommended that NPA make a study of possible misuse of defense order (DO) ratings assigned to specific programs. Members said there may be duplications of orders to producers, which situation might tend to give an inflated picture of DO demand.

### HONOR SEATTLE PRINTER

K. Einar Carlson, owner of the Consolidated Press and the Publications Press, Seattle, Washington, recently was awarded the Order of Vasa Medal, First Class, by the King of Sweden. The award was made for Mr. Carlson's outstanding service to the Swedish community of the area. Mr. Carlson has, since 1926, bought and consolidated seven printing plants into the two he now operates.



Arthur R. Treanor, director, Printing and Publishing Division, National Production Authority

*Do you  
know that...*

● The Branch Inventory Department at American Type Founders is the result of merging its domestic sales division's order department with the inventory control department. T. J. McNally is manager of the department. Jack T. Baird and Edward G. Wieritsch represent ATF in the Cleveland territory now. . . . Annual meeting of the Research and Engineering Council of the Graphic Arts Industry has been postponed until late in the fall. The place and time will be announced by President Frank F. Pfeiffer. . . . Howard Elliott and Frank J. Scanlan have been appointed district sales representatives for the Star-Kimble Motor Division of Miehle Printing Press and Manufacturing Company, Bloomfield, New Jersey. . . . R. L. Crain Limited, Ottawa, Canada, announces that it will take a "breather" from August 4 to August 19 inclusive. . . . John G. Severson is technical representative in the new St. Louis territory opened to expand Eastman Kodak Company graphic arts service. Fletcher G. Gorman is now a member of the company's Rochester graphic arts studio staff. Lester E. Goda, Jr., has been assigned as the new technical representative for the Cleveland territory. . . . Harold N. Cornay of New Orleans has been re-elected president of the Southern Graphic Arts Association, and Frank H. Parke, president of the Democrat Printing and Lithographing Company of Little Rock, Arkansas, was re-elected vice-president of the SGAA at the recent convention in Natchez. . . . The National Production Authority, United States Department of Commerce, has announced the membership list of the Graphic Arts Equipment Industry Advisory Committee to be: Edward G. Williams, president of ATF; Wesley Lee, vice-president of Challenge Machinery Compay; George A. Heintzemann, president of Dexter Folder Company; James Campbell, president of Douthitt Corporation; Edward C. Spencer, assistant to chairman of the board of Harris-Seybold Company; Joseph L. Auer, president of R. Hoe and Company; Harry G. Willnus, vice-president of Intertype Corporation; Henry Nygren, president of Nygren-Dahley Company; A. W. Joyce, secretary of Potdevin Machine Company; Harold T. Simpson, president of the Printing Machinery Company; J. F. Van Cata, general manager of R. R. Robertson; and Fred S. Tipson, vice-president of T. W. and C. B. Sheridan Company. . . . Anthony Capello,

of Philadelphia, is the new president of the National Association of Litho Clubs. Other officers are: J. F. Maguire, New York, a vice-president; Frank Petersen, Cincinnati, treasurer; and Joseph Winterburg, Philadelphia, secretary. . . . The Printing Institute of Philadelphia has closed due to revenue losses. . . . The National Society of Art Directors chose Gordon C. Aymar, consultant art director-designer, "art director of 1951." . . . William P. Gildea, Jr., president of the Falconer Company, Baltimore, has been appointed to the NPA Commercial Printing and Lithographing Industries Advisory Committee. . . . Champion Paper and Fibre Company has broken ground for a new building addition at the plant site in Hamilton, Ohio. A year or more will be needed to complete the project. . . . Dave Baer, Goss Printing Press Company sales representative, was seriously injured in an auto accident at Chariton, Iowa, on May 10. . . . Lillian B. Wuerfel, art director and creator of books and records for children at Regensteiner Corporation, Chicago, is entering the free-lance field. . . . H. C. MacDowell has been added to the sales force of Brown-Bridge Mills and will cover the Atlantic coast states from Baltimore south. . . . Kenneth J. Watts has taken over the shop of the late Henry F. Martin, the Little Print Shop in Compton, California. . . . The entire slate of 1950 officers of the Lithographic Technical Foundation has been re-elected for 1951: president, Harry E. Brinkman; vice-president, R. E. Damon; treasurer, George K. Kindred, and secretary, Ralph D. Cole. . . . T. Vincent Lally was honored recently as he completed 45 years with *The Perth Courier*, Perth, Ontario. . . . Laurence H. Victory, *New York Mirror* chapel,

was elected president of the New York local of the International Typographical Union recently, and George C. Bante, *Chicago Sun-Times* chapel, was elected president of Local 16. . . . R. Mort Frayn has been appointed a member of the task committee of the Commercial Printing and Lithographing Advisory Committee of the National Production Authority, Department of Commerce. . . . Leo Geiser has been named director of production for the Champion Paper & Fibre Company, becoming a member of the company's administrative group, with staff supervision over all pulp, paper, board, and finishing operations, as well as scheduling and inspection in the mills at Hamilton, Canton and Houston. He has been with Champion twenty-nine years. . . . Harry Gottlieb, co-founder with his brother, Samuel, of Mansfield Press, New York, in 1927, died during May at the age of fifty. . . . Howard E. Whitaker has been elected executive vice-president and a director of the Mead Corporation, to succeed J. O. Mason, who has retired but will continue in an advisory capacity. . . . Robert Fossett has joined the staff of Switzer Brothers, Cleveland, as assistant to Dale Winslow, manager of Day-Glo Coatings. . . . Herman Hillmer, president of the Paramount Paper Products Company, Omaha, died May 16 at his home in Omaha after a prolonged illness. . . . Kodak's 1950 dollar sales of products for the printing, publishing, and allied trades were five times the 1940 level, according to an article in the current issue of Kodak's quarterly stockholder publication. . . . William J. Tilden, vice-president of the Mead Sales Company, will become manager of Mead's Chicago office on

(Continued on Page 72)



Officers elected by New York Craftsmen to head activities for 1951-52. Back row: center, James L. Goggins (Publishers Printing Company), president; left, Edward C. Sanna (Arco Manifolding Company), first vice-president; right, Edward Blank (Uniform Printing & Supply Division, Courier-Citizen Company), treasurer. Front row: left, Charles B. Smith (Brooklyn Eagle Press), secretary; right, Harry Flowers (Flowers Color Photo Composing Laboratory), named as second vice-president

# I.P. BREVITIES

Stray items about the trade and the men who make it. Bits of information collected and set down here for your edification and pleasure. Edited by GEORGE EATON



★ *Typhothetae Bulletin* comes up with this one: A printer was asked by a physician to submit a price on a letter-head; different sizes, different grades, different colors, and a number of other "differences" were to be included in the printer's "bid." In addition, the form was to be left standing. Printer answered in the following way: "Am in the market for bids on one operation for appendicitis. One-, two- or five-inch incision—with or without ether—also with or without nurse. If appendix is found sound, want quotations to include putting same back in place and canceling order. If removed, successful bidder is expected to hold incision open for about sixty days, as I expect to be in the market for an operation for gallstones at that time and want to save the extra cost of cutting."

★ A wasp, fortunately dead, was attached to a letter mailed to Arkansas grocery jobbers during World War II. The letter began: "WANTED—1,000,000,000,000,000,000 wasps, now unemployed, to get back to work, producing paper. Apply WPB, Washington, D. C." The letter explained that the lowly wasp was the original maker of paper. It was produced by Fulton-Wassell Paper Company of Little Rock, Arkansas.

★ Do black flies have a color preference? The answer to this problem is being sought, states *CanadaInk*, by the Ontario Research Foundation. D. M. Davies is testing printing ink colors as well as dyed fabrics this summer. It is hoped that the market for printing inks will not be seriously affected.

★ The new Federal Specification, better known as the Federal Color Card for Paints, reduces the more than 600 paint colors formerly used by the Government to 187 by eliminating unimportant variations of different shades. The various branches of the U. S. Government collectively form the largest purchaser of paint in the world.

★ The Honorable John J. Deviny, Public Printer of the United States, had a part in the opening ceremony of the Watford Industrial Exhibition during the Festival of Britain by broadcasting or recording a message from the Government Printing Office in Washington, D. C.

★ It has been estimated that 88 per cent of all accidents and injuries result from unsafe acts—the *human element*.

★ Ever since the days of King Arthur there have been round tables. But few probably are as productive as the Planned Advertising Round-table. This is a small informal group of sales managers primarily representing creative printers from different parts of the country. At present the membership includes James Gray, New York; Leo Hart, Rochester; Keller-Crescent, Evansville; Wetzels, Milwaukee; Saturday Night Press, Toronto; Jaqua, Grand Rapids; Western Litho, Los Angeles; and McCormick-Armstrong Company, Wichita.

★ The advertisement headlined "A Few Appropriate Remarks," second in a series of Gilbert Paper Company "Messages That Made History," won a permanent place in the collection of the Lincoln Fellowship of Pennsylvania at Gettysburg. The original painting, by James Lockhart, will be on display in the museum's Lincoln Room.

★ President Truman presented the Silver Quill Award of the National Business Publishers Association to Paul Wooton, one of the deans of business journalism in the United States. Mr. Truman said, "We are faced today with aggression; we are faced with inflation. The business press can help us to meet both."

★ Toronto's United Church Printing House recently letterpressed *The Book of Common Prayer* in the ninety-six Eskimo characters. It required new key-tops for the Monotypes, special matrices, and three months of pick-and-hunt by operator John MacDowell before the 598-page book went to press for a run of 5,000 copies.

★ *The British Printer* points out that the mark of the first English printer, William Caxton, was not the first English printer's mark. The orb and cross mark of an anonymous Saint Albans' printer appeared in 1483 in an edition of *Chronicles of England*. Caxton's mark did not appear until 1487, and although it was the authentic mark of the first English printer it actually appeared first in a book printed by Maynayl in Paris. The mark in that book, however, was printed by Caxton in England.

★ *Dillon's Paper Circular* points out that it is generally accepted that the first sheet of paper with a watermark was produced in Italy about the year 1282.

★ Rudolph Ruzicka, wood engraver and designer, has commented as follows on W. A. Dwiggins: "He was at one time the chief Artificer of that serious and extremely complex art concealed under the smiling term 'marionettes,' a private show business in which he frequently was the dramatist, and always the scene designer, wood carver, electrician, and impresario. He was too a designer of advertising, a field long abandoned for more stable ends. Throughout his long career he has been a calligrapher of sensitive and altogether individual hand, and within the past decade he has become our leading designer of types—a short title catalog still incomplete."

★ *The Montana Press* has gone to some length to explain why editors get rich: A girl is born. The attending physician gets \$25 and more; the editor gives the youngster and the happy parents a send-off and gets \$0. When it is christened, the clergy gets \$10. The editor gets \$00 for his writeup. The editor publishes another long-winded article and may perhaps tell a dozen lies about the beautiful, accomplished bride. The clergyman gets another \$10 and a piece of cake. The editor gets \$000. In the course of time she dies. The doctor gets from \$25 to \$100 dollars more—undertaker from \$200 to \$500. The editor publishes the obituary, two columns long, lodge and society resolutions and the like, and gets \$0000. No wonder he's rich.

★ Western Union combed the country for an old House telegraph printer to use in its centennial celebration. From last report, the company hadn't been able to find one, though hundreds were in service during the Civil War period. The House printer was the first telegraph machine to print roman letters, numerals, and punctuation, rather than code.

★ The dollar volume of direct mail advertising used by American business during the first four months of 1951 was \$353,136,365. This represents a gain of 13 per cent over the corresponding figure of 1950.

★ Over the entrance to the Art Color Printing Company, at Dunnellen, New Jersey, is a sign reading "Through These Portals Pass the Finest Craftsmen in the World." The firm recently won an award for distinctive merit for excellence in reproduction at the thirtieth annual exhibition of advertising and editorial art held recently in New York.

★ *Nation's Business* recently presented the development and growth of the printing industry: "From its early days when one man was likely to be a printer, type foundryman, publisher, and ad solicitor, the printing business has developed into a highly specialized and mammoth industry.

"There are more than 43,985 printing establishments in the United States—the largest group of manufacturers in the country. In one recent year the staggering total of 798,000,000 books rolled off its presses and some 40,000,000 newspapers are published daily.

"In Franklin's age there was such a small handful of printers that he had to go abroad to learn the trade. Today the industry employs 715,450 persons and spends \$1,318,000,000 in wages and production every year, something like fifty times the entire amount of money that was in circulation in the United States in Old Ben's time!"

★ On the back cover of a recent issue of the *Williams Press News* is a picture of a man holding a scroll reading: "I resolve to observe the safety rules which common sense tells me are for my protection, my family's and my fellow-workers' and to make our plant a safe place to work and our community a safe place to live."

★ John P. Lewis, editor of the *Franklin* (New Hampshire) *Journal-Transcript*, won the National Board of Fire Underwriters gold medal award for outstanding service in fire safety.

★ *The Antiquarian Bookman* recently issued a special Bible supplement honoring the 500th anniversary of the first printing of the Gutenberg Bible. A census of the known copies of the 42-line Bible showed a record of forty-five copies: twelve in the United States, eleven in Germany, nine in Great Britain, four in France, two in Italy and Spain, and one copy in the five countries of Austria, Denmark, Poland, Portugal and Switzerland. Then, the following week, a copy from the library of Sir George Shuckburgh was sold to Charles Scribner's Sons, of New York. Thus the American total goes up to thirteen.

★ Nekoosa-Edwards Paper Company mills at Port Edwards and Nekoosa, Wisconsin, have been honored by the National Safety Council for reducing accidents during 1950. The 1950 accident frequency rate at the Port Edwards mill was 4.12 and the Nekoosa mill's rate was 5.84. The rate is based on the number of accidents per million man-hours worked. Both are well below the 70-mill group average of 8.70. The paper manufacturing concern has been a member of the National Safety Council for thirty-seven years.

★ *The Augusta (Kansas) Gazette* observes that it is a known fact that much of Sally Rand's success was due to her "advertising." But the thing the paper wishes to point out to advertisers is the fact that she used plenty of white space.

★ The Master Printers' Association, a division of Printing Industries of Philadelphia, is producing a series of informative booklets which are being distributed widely within the Philadelphia area. Each of these booklets carries a large reproduction of the "Master Printer Seal of Craftsmanship" and includes a short message describing the benefits derived by the customer who deals with a Master Printer.

★ The annual edition of the *Bawl Street Journal* descended on New York City's financial district on June 7. Published once a year by the Bond Club of New York, this year's effort had General MacArthur elected president of the New York Stock Exchange. The treasury advertised "two-way-stretch bonds" permitting interest rates to go up and down at the same time. Also included is the "HST Correspondence School" urging readers to "write the kind of letters that are read around the world."

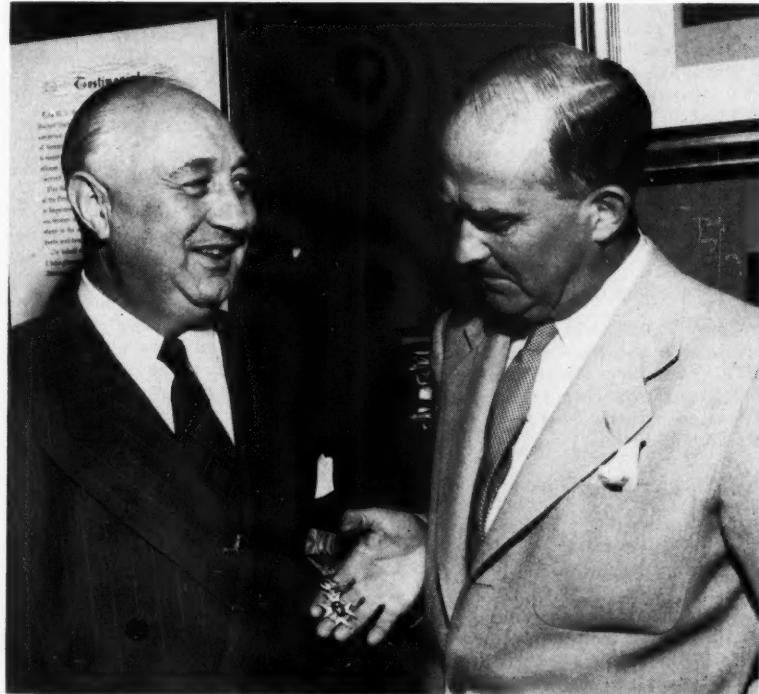
★ Material for the Young Book Designers Show recently held in New York City was selected by three jurors, Merle Armitage, Eugene Ettenberg, and Robert Josephy, from work submitted from all parts of the country. It consists of book designs by young people who have never before been recognized professionally. The show was supplemented by actual books designed by graduates from the last Young Designers Show, some of whom are now recognized book designers.

★ The Phoenix (Arizona) Chamber of Commerce, radiating sunshine, tells us that thirty Chicago engraving firms have undertaken a campaign to encourage employees to take their vacations throughout the year. The Chamber is setting up a special department to furnish off-season vacation information to people in the printing and other industries in which a normal business slump occurs at times other than the summer.

★ The Montana Press Association asks: What is an hour worth to you? In a year there are 365 days. This means 8,760 hours all told. Do some figuring. Eight hours a day, six days a week, fifty weeks in the year (two weeks for recreation), gives you 2,400 hours. Deduct ten days, eighty hours, for holidays, and you have left only 2,320 hours for work. Life consists of three supposedly eight-hour shifts, one for work, one for sleep, and one for recreation. Do you know that you sleep 600 hours more than you work, and you loaf or recuperate or piffle 600 more hours than you labor?

We are now pretty close to the working value of Time and we get a startling view of the cost of Waste.

If you make \$1,500 a year, each hour is worth \$.65. If you make \$2,250 a year, each hour is worth \$.97. If you



K. Einar Carlson, left, owner of the Consolidated Press and Publications Press, Seattle, smiles proudly as Ivar Lundquist, Swedish Consul in Seattle, looks at the Order of Vasa Medal, First Class, presented to Carlson for his outstanding work by the King of Sweden

make \$3,000 a year, each hour is worth \$1.30. If you make \$6,000 a year, each hour is worth \$2.60. If you make \$12,000 a year, each hour is worth \$5.20. If you make \$25,000 a year, each hour is worth \$10.78.

Put down on paper what you have earned in the last twelve months. Divide it by 2,320 hours so you may realize what each hour is worth to you. Then when you fritter or waste an hour, two hours, three hours a day, you can translate their value into dollars and cents and see what a foolish fellow you are.

★ *Newsweek* magazine recently commented on the research program carried on by the Pennsylvania Salt Manufacturing Company, which is celebrating its hundredth anniversary. "In 1928 the firm set aside 1 per cent of sales for research. Result: 28 per cent of current profits come from products the company has added since 1940. Today more than 2 per cent of sales goes into research."

★ Records show that in the last quarter of 1950, two million man-days of work were lost through accidents—a total of 95,000 accidents! Now is the time to start a plant safety program to keep your plant free from accidents and accident hazards. Safety saves manpower.

★ Productivity Team Year might be the identification of 1951. Twelve members of a French paper and paperboard team have been visiting representative pulp and paper facilities in the United States under auspices of the Economic Co-operation Administration.

★ The Little Giant Exhibittruck recently completed a 26,000-mile demonstration run through southern and western states for American Type Founders. The truck was credited with half a million dollars worth of sales promotion by company spokesmen.

★ Know the date of the first printing press in Ireland? It was back in the year 1551 when Humphrey Powell established himself in Dublin, became Printer to the King, and established the first printing press in the land.

★ Let's all support the nation-wide education program against industrial accidents which Secretary of Labor Tobin is advocating through news columns and locally sponsored advertising. A good safety program is good business.

★ From *The British and Colonial Printer* we learn that Richard Dumbleby, editorial director of the *Richmond and Twickenham Times* and its associated newspapers, is shortly to be represented at Madame Tussaud's in the waxworks gallery of famous people.

★ Dun and Bradstreet has issued a documentary 16 mm. film entitled "Credit, Man's Confidence in Man" for use by schools, trade associations, credit groups, and the like. The film illustrates the function of credit in the growth of America and its indispensable place in our modern economy. The film runs 33 minutes and is available for use without charge.

★ If you think black on white is the most legible color combination, you will be disturbed by the fact that a comprehensive scientific study has disclosed that the leading combinations in order of visibility are: black on yellow; green on white; red on white; blue on white; white on blue; black on white; yellow on black; white on red; white on green; white on black; red on yellow; green on red; red on green; and blue on red.

★ The Sheppard Envelope Company of Worcester, Massachusetts, offers to send a dozen Envō-Letters (similar to V-Mail but larger) to servicemen in Korea. If you will put the name and APO address of a friend and relative on a postcard as well as your own name and address, Sheppard will send the dozen Envō-Letters free.

★ Donald Hermann and Kelvin Arden, journalism students in the evening division of the Northwestern University, are the 1951 winners of the two \$100 McMurtrie scholarships offered by the Industrial Editors Association of Chicago.

★ The Mosstype Corporation, Brooklyn, New York, is conducting a poll on a better name for "aniline" printing. The company estimates that aniline printing output is \$50,000,000 a year and rapidly growing in size.

★ The Lithographic Technical Foundation has been awarded a Certificate of Co-operation by the Economic Co-operation Administration for its role in sharing its knowledge with visiting lithographic productivity teams.

★ Monty Woolley will portray a platen pressman in the 20th Century-Fox film "Will You Love Me In December?" Don't ever remember seeing a platen pressman with the beard and bearing of Mr. Woolley.

★ Many newspapers, magazines, and radio stations flew the American flag at half-staff recently in mourning for the Buenos Aires newspaper *La Prensa*, which was suppressed.

★ *The Paper Market* carries the news that India now has sixteen paper mills with a production capacity of nearly 125,000 tons per year.

★ The National Safety Council points out that more than two-thirds of all industrial injuries occur in businesses with fewer than 100 workers!

Do you  
know that...

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August 1. Mr. Tilden succeeds George H. Fay, who will retire from active duty but remain available in a consulting capacity. . . . Peerless Photo-Engraving Company and the Hill Reproduction Company, both of New York City, have merged under the name of Peerless-Hill, Incorporated. Arthur M. Malion is president and general manager. Emil Weltz is vice-president, H. F. Hassard is secretary, and H. J. Roeser is treasurer. . . . Ralph B. Tufts has been appointed director of research for the Cornelius Printing Company of Indianapolis and Silver Springs, Maryland. . . . The Fair of Italy will be held at the Grand Central Palace, New York City, from August 15 to August 30. . . . The Seventh International Congress of Master Printers will be held in London from July 23 to July 27. . . . On July 11 the Reuters news agency celebrated its one hundredth anniversary. . . . Louis Bloch, chairman of the board of the Crown-Zellerbach Paper Company, died in San Francisco on June 12 at the age of seventy-six. . . . Jay W. Holmes has joined the Gummed Products Company, Troy, Ohio, as a special mill representative. . . . Lloyd F. Giegel has been appointed branch manager of the Gary, Indiana, sales office of the Reliance Electric and Engineering Company, and Daniel J. Donnelly has been named a sales engineer at the company's Philadelphia office. . . . Irving L. Greene is now vice-president and director of the Gerlach-Barklow Company, Joliet, Illinois. . . . Carl E. Dunnagan of Inland Press is president of the Franklin Association of Chicago. Other officers recently elected are Harry O. Kovats of Runkle-Thompson-Kovats, vice-president; and R. J. Geimer of American Colotype Company, treasurer. The association represents employers in their relations with printing trades unions. . . . G. F. Maccabe, former editor of *Canadian Homes and Gardens*, has been appointed manager of that publication and its subsidiaries, *Brides Book* and *Book of Homes*. Jean McKinley, formerly managing editor, is now editor of the three publications. . . . Walter Dorwin Teague, designer, has been elected president of the American Institute of Graphic Arts, succeeding Merle Armitage. The Institute's annual gold medal award for distinguished service to the graphic arts this year went to Harry L. Gage, graphic arts consultant for Mergenthaler Linotype Company.

# Work-Ups Can Be Avoided

● WORK-UPS are one kind of spotty printing. The other kinds are caused by dirt, dust, and lint from paper and ink, and from the air (called collecting) and by ink picking paper. Collecting and picking are more common but work-ups are more costly from hopelessly spoiling more jobs. Work-ups may end in pull-out or a smashed form or a damaged press. The careful pressman tries to feed all jobs to register so that the sheet may be sent through the press again to correct a pull-out should it occur.

Many commercial plants as well as magazine and newspaper plants reduce the work-up trouble to the minimum by printing from plates. This is not practicable for all plants, so some printers have been forced to study the causes of work-ups and adopt preventive measures.

## Four Principal Causes

There are four principal causes of work-ups: 1. Dimensional errors in the units of the form such as wood mounts, machine-cast slugs and type, rules, borders, strip material, spacing material, and so on; 2. Faulty justification, either in itself or because of the dimensional errors in the units of the form; 3. Improper lock-up, either on imposing table or the bed of the press; 4. Faulty presswork, which includes press not properly leveled, bed of press not down on the bed ways, overpacked cylinder, and similar irregularities.

In order to avoid dimensional errors, careful inspection of all ready-made units purchased outside as well as those produced in the plant is necessary. All machines used to produce the units in the plant are checked for accuracy at regular brief intervals. Strip material cut on the composing room saw, whether metal or wood, should be cut to a standard gauge and measured in a compositor's stick. Furniture requires regular inspection and replacement as needed. Not only the true dimension of units must be checked but also changes caused by accumulated dirt and damage due to faulty lockup—when reglet is not interposed between furniture and quoins, for example. Machine-cast type and slugs are kept as accurate as is possible.

These precautions are of vital importance in coping with work-ups

By EUGENE ST. JOHN

because justification depends on accuracy in the units of the form. All printers are well aware of the fact that nothing can take the place of thorough justification because of the peculiar lockup of printing, obtained not with nails or screws but with wedges in the form of quoins. It is not possible to lock a form properly if a lead, line of furniture, reglet, rule, or slug is too long; or if wood mounts are not rectangular, top to bottom, side to side; or if borders or panels do not fit; or if furniture or chase is not true.

Every effort is made to obtain justification in the composition and makeup stages. If it is not, after careful check on the galley and the modern makeup gauge, the stoneman still checks the justification by placing quoins under the chase and sounding the form.

Work-ups, in the final analysis, are caused by the form not being firmly seated on the bed of the press so that a pumping under impression ensues. Since the units cannot go through the bed, they must rise as work-ups.

Although the ultimate units of the form may be correct in dimension and properly justified in the form, a proper lockup is also necessary to avoid work-ups. Chases with crossbars are preferred for large forms. Chases of steel, preferably electric-welded, must be used right side up and must be true. Head and foot furniture should be a little shorter than the width and side furniture, a bit longer than the

length of the page. Straight-thrust quoins are better and should drive toward crossbars.

While equal pressure at side and foot of each page is ideal it may be necessary to deviate from the rule at times. For instance, a lot of machine-cast slugs might be locked with more squeeze on the ends of the lines than at the foot, or a page of machine-cast type with more squeeze on the bottom than at the side of the page.

There are advantages in using long lengths of furniture together with long quoins but at times it may be better to lock columns with individual short quoins, taking care that inter-column rules or slugs are not so long as to bind.

## Use Metal Furniture

Metal furniture is preferred to wood for forms in which dimensional errors are absent but the quoins should not contact the furniture, and reglets are interposed. The quoins are usually placed midway between the outside edges of the form and the inside edges of the chase but at times it may be necessary to arrange quoins to squeeze directly against a certain part of the form. On some forms the quoins may be placed to advantage in the spacing material inside of the form. However, excessive squeeze should not be used in an attempt to cope with bad justification.

An example of the need for use of wood furniture is found in a form with lines of machine-cast slugs which cannot be locked to lift with metal furniture. Such a form may be lifted when wood is substituted because it yields and takes up inaccuracies in dimension in the slugs. A makeshift like this is only for an emergency as it spoils the wood furniture.

When choice of arrangement is possible, machine-cast slugs with dimensional errors should be imposed at right angles to the press cylinder. Faulty machine-cast type and poorly justified foundry type should be worked with the lines parallel to the cylinder.

Experienced pressmen always see that the bottom of the form and the bed are clean. After the chase is positioned on the bed, the quoins are unlocked and the form planed down. When small forms are to be printed it is helpful to use patent lock-ups

## Fuzzy Type

Type which accumulates fuzz after a few runs can often be quickly cleaned by feeding in a sheet or two of heavier stock before proceeding. The thicker sheet digs in around the type face and cleans the ink and fuzz away from the striking surface, so that the lighter stock which is to be fed will receive a sharp clean print.

By Stanton R. Gaylord

instead of covering up the unused part of bed with furniture. These lockups are designed to cope with the tendency of chase and form to rise under pressure of lockup.

Before planing down, the bed clamps should be tightened with the fingers to avoid bending the chase inward. After locking the quoins, the bed clamps are finally locked, taking care not to lock either quoins or clamps extremely tight as this tends to spring or arc the form.

Work-ups may be caused by too much vibration due to the press not being level, incorrect set of air resistance, and bed not down on the bedways. Operating the press at too high speed may cause enough vibration to cause spaces to rise.

In recent years various kinds of sinkers have been introduced to the trade for use in emergencies. Strips of shimming copper about .002-inch thick are used as sinkers by some while others use thin cardboard. Wet strawboard remains damp to be used as shim for short runs. One of the popular shims consists of a thread of string glued between two strips of gummed paper, parallel to their longer dimension and well out of center so that the shim may be used to fill spaces of different width, by inserting it upright or upside down as needed.

#### Necessary Precautions

A vivid illustration of the pumping action that causes work-ups is to be seen when the brads used to hold a plate on a wood mount work loose and up and print. This may be caused by faults of presswork previously listed or by improper underlay or interlay. When the heads of brads print, the plate and mount should be examined. The plate may have been pulled down too hard on its edges in nailing it on the wood mount or the mount may be unlevel and rocking under the impression. When remounting, if new holes are drilled for the new brads, they should be a bit smaller in diameter than the brads to enable them to hold better.

Soft cylinder packing increases the tendency toward work-up because the units of the form penetrate deeper into the packing and so are subject to greater drag on impression than with hard packing. This drag tends to loosen the units in time and so may aid in causing work-ups.

Needless to say, all unlocking of forms for shimming, relocking, and possibly repeating the performance is a horrible and deplorable waste

of production time of the press. It is much better to take the necessary precautions in advance to avoid such tinkering, which is practically nonexistent in a well managed plant.

#### Jensen Boards

(Concluded from Page 47)

bulletins, safety committee meeting notices, and similar material.

The boards were quickly made and installed, with gratifying results. They were very well received and the "Hats Off" section became a popular item with the employees. Comments such as "I ran that job!" and "That's my layout!" were common around the boards.

We at Jensen feel that we have taken a step in the right direction. It's a small step and we do not intend to rest on the oars now. We are presently designing attractive two-color letterheads for each section of our boards to be printed on four different colors of stock. Each week, when we change the material on the board, the colors will also be changed. This will make it apparent to the employee that the notices and bulletins are new and therefore as yet unread. By the same token, he knows when the board is unchanged and need not check it over if he is already familiar with its information. We believe the employee is entitled to that consideration.

It will be very interesting to see whether our "gun crews" continue to get a kick out of knowing what they are shooting at and whether it will affect their work. Only time will tell. But, in the meantime, we have little money invested and are having a lot of pleasure as the "forward observers."

#### RETRIEVING MATRICES

When trying to withdraw matrices that have slid sideways into the magazine, something more useful than a slippery wire is a long, thin, flat piece of wood with a rubber band woven tightly around the tip. Where the matrices often slip away from the hook of the wire, the pressure of the flat stick and the grip of the rubber hold the mat firmly until it is at the top and within grasp of the fingers.—*Stanton R. Gaylord*

#### SCIENCE RESEARCH ASSOCIATES

Credit for permission to reprint the Christmas card which appeared on Page 57 of THE INLAND PRINTER for March, 1951, should have been given to Science Research Associates of Chicago. The card was designed by Susan Karstrom, art director of organization.

#### Krueger Offset Plant

(Concluded from Page 42)

company, share a percentage of the firm's profits each six months. A labor-management committee has been in existence for over six years. It is composed of four management representatives and five employee representatives. Each of the key departments is represented. The five representatives of the employees are elected by the employees themselves and serve a one-year term. The committee meets each month to review ideas, discuss improvements, and iron out any problems.

World War II took almost 25 percent of the company personnel. All but two returned to the company; one remained in the Navy and the other opened a small trade plant in California. Read like Shangri-La? Besides bowling teams, parties, and picnics, there are open house events for employees' families to keep that team spirit up. Two busses took seventy of the employees to the Sixth Educational Graphic Arts Exposition last fall.

Such a firm would be pardoned for not worrying about employee loyalty. But not Krueger. When an employee completes five years of continuous service, he receives a black onyx ring in a gold mounting. A small diamond is added at the end of ten years' service. This precious stone is replaced by a larger diamond at the conclusion of fifteen years of service. The company has other awards for longer periods of service. There are now thirty-six Loyalty League members at the W. A. Krueger Company and, from the looks on the faces of the employees, Krueger had better stock up on diamonds!

#### CONSTRUCTION LIMITS

National Production Authority Construction Order M-4 has been amended. NPA authorization is required for construction of additions, improvements, or modernization of industrial facilities which require the use of more than 25 tons of steel. Printing plants are specifically covered in this order.

Exemptions to the order permit the following: Construction of industrial plants, facilities, or factories for which a Certificate of Necessity has been issued free from restrictions of NPA order M-4; installation of personal property, fixtures, or equipment where the total cost incurred for installation in any 12-month period does not exceed \$2,000; small jobs or new construction, alterations, additions, improvements, or modernization if the construction cost is not more than \$5,000 in any 12-month period.

# Characteristics of Offset Inks

(Continued from page 63)

vehicle bases, as do many of the conventional inks now being supplied to lithographers. Improvements in press design, rollers, and blankets have also had much to do with making the use of such inks possible.

Since the effect of water on the ink must always be a foremost consideration in the selection of materials for use in offset inks, the synthetic resins used must in many instances have considerably different properties from those used in letterpress. Likewise the chemical properties of these resins can have much to do with the behavior of the plate on the press. Improper balance of these properties can result in scumming, which calls for an increase in acidity or the amount of water carried on the plate, or cause the image to work sharp or go blind. These, of course, result in a poorly printed job.

As explained in a previous discussion in these columns, all that the inkmaker can hope to do is to supply to the lithographer a base color from which the pressman can work, or at best an ink which is correct for some average or specific type of job. The usual reason given for this is that the pressman must be able to adjust the ink for the different types of paper he must run. This is only part of the story. The most important single factor appears to be the relative proportions of image and non-work areas on the plate. Identical inks on identical presses in an air-conditioned pressroom will not print the same on identical stocks if the ink coverage on the two jobs differs greatly. Compensation can be made to some extent by changing the acidity of the water solution but this practice cannot be made to cover all conditions.

In making these additions to the ink the pressman adds (in addition to drier) varnishes, compounds, or both. Although these additions are generally made on a rule-of-thumb basis, the pressman attempts to prevent picking of the stock and at the same time make the ink more greasy or less greasy. He wants it to strengthen the image areas or to prevent scumming. At the same time he wants it to transfer properly.

Everyone who has spent any time around an offset press knows that as soon as the form rolls are dropped on the wet plate, they pick up mois-

ture, and as this moisture works up through the distribution system the press speeds up. It does this because the tack of the ink is reduced. Of course, the water on a plate just after the asphaltum has been washed off is much greater than it is at any time during a normal run, and it is at this time that the speeding up of the press is the most noticeable. It is because the ink is so water-logged at this time that it is necessary to

run a number of waste sheets before examining one for color or printing values. It can be seen that the initial tack of the ink bears little relationship to the tack at the time the ink is applied to the paper, and that an ink which would be all right for a light form might pick the stock on a heavy form, more water being introduced into the ink on the light form.

Thus when straight linseed-base inks are used and the pressman reduces the tack of the ink to print a heavy form, he adds either a "greasy" soft varnish or a compound, he is helping the ink to pick

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Advertisers who use sales blotters with  
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A phone call to your nearby Wrenn  
distributor will bring you samples.

**THE WRENN PAPER COMPANY**  
MIDDLETOWN, OHIO

up more water and further reduce the tack. But at the same time he is increasing the tendency of the ink to cause the plate to scum. The only way in which he can counteract this tendency is to increase the acidity of the fountain water. With inks formulated from vehicles which contain synthetic resins, much more latitude is made available, and when some of the newer types of reducers are added by pressmen the control is not nearly as critical.

In each case, however, it must be remembered that three factors are

affected: the reaction between the ink and the plate, the reaction between the ink and the fountain water, and the ability of the ink to transfer not only from the distributing rolls to the form rolls, but from the form rolls to the plate, from the plate to the blanket, and from the blanket to the paper. No such problem is encountered in letterpress printing, and although adjustments must occasionally be made in inks to make them print clean and sharp without picking, heavy and light forms may be run interchange-

ably with the same ink since nothing detrimental to the ink is picked up on the roller areas not in contact with the printing elements.

Earlier in this discussion it was stated that the reason offset inks are made tintorially stronger than letterpress inks has frequently been ascribed to the fact that a double transfer takes place. From this writer's experience this reason does not appear to be valid. The claim is made that in transferring the ink from the plate to the blanket, only half of the film thickness on the plate is transferred to the blanket, hence only half as much ink is removed from the blanket by the paper as would be removed if printing were directly from the inked form. Studies of the apparent amount of ink transferred either directly by letterpress or by offset fail to show any noticeable difference in the thickness of the film transferred, but there is a striking difference in the shade of ink.

A similar difference can be noted (although it may not be identical) when a rubber plate is substituted for a metal one in letterpress printing; much of the difference in shade depends on the hardness of the rubber plate. It likewise depends to a great extent on the hardness or absorptiveness of the stock and the ability of the ink to transfer to the stock. Perhaps the only thing which gives any indication why this is the case is the fact that in letterpress printing from metal plates the ink is literally "squeezed" into the stock whereas when printing from rubber it is merely laid on it. This is further borne out by the fact that when rather thin inks are printed on an offset press the difference is very slight because the paper can very quickly absorb the ink from the blanket.

Thus it can be seen that water and the chemical nature of the plate make necessary differences between offset and letterpress inks, and that it may not be possible to exactly match a letterpress print on an offset press. This may be true because the exact type of color used in letterpress may not be suitable for use on an offset press, or because in transferring from a rubber blanket to the paper a slightly different shade results. In most instances, however, a fairly close match can be made. As to the reactions which actually take place between ink and water, and ink and plates on an offset press there is very little published information concerning these, and as a result some of the statements made above may appear rather dogmatic.

**ONE! TWO! THREE! FOUR!**

**Practical Aids to Better Presswork**

Your regular inks will print better—under all conditions—when you add these ink conditioners, according to simple directions. Results are uniform and positive! Your inks are always at printing peak. Many press troubles vanish!

**"33" INK CONDITIONER**  
For letterpress. With "33", presswork improves noticeably. Colors pop out with greater brilliancy. Halftones stay "sharp, clean, and open". Picking and tackiness are eliminated. Increases affinity of ink to paper. Makes good ink better.

**"0-33" INK CONDITIONER**  
Developed particularly for litho and multilith. Similar in all qualities to "33". Saves time in wash-up. Smaller spray volume required. Ink flow is uniform . . . less adjusting is required. Fewer re-runs are necessary.

**"600" INK CONDITIONER**  
It does for light-bodied inks what "33" Ink Conditioners do for normal inks. You get greater overall print quality. Added bulk provides 15% to 30% greater coverage—at little extra cost. Unexcelled with gloss inks.

**GLAZCOTE INK CONDITIONER**  
Makes your REGULAR inks scratchproof. Glazcote assures a tough, glossy, abrasion-proof finish. Add in small amounts, according to simple directions. It's a proved answer to one of printing's most troublesome problems. Try it in your shop.

**Contains HYPOTHOLATE**

**100% Guarantee**

**8 LB. TRIAL ORDER:**  
If our Ink Conditioners do not satisfy you completely, return the unused portion at our expense!

**Central COMPOUNDING COMPANY**  
1718 North Damen Avenue Chicago 47, Illinois  
IN CANADA—it's CANADIAN FINE COLOR CO., LTD., TORONTO  
Export Division: Guterman Co., Inc., 35 South William Street, New York 4, New York

## Controlling Efficiency

(Continued from Page 41)

said sons may ultimately be found to be better automobile mechanics. Apprenticeship needs careful study. It is largely through apprenticeship training that America has developed the greatest productive capacity of any nation. We must increase that capacity not only for the future of printing but also for the future of our country.

"Lack of careful management planning gets my vote as the Number One problem of many printers the country over. The solution: Get your house in order by studying and analyzing ratios—the highs and lows of printing and just where you fit into the picture in your locality. The old rule-of-thumb proportion may be outmoded but still not too far off the beam: one-third for labor; one-third for material; and one-third for overhead and profit. That last one-third is where the effort must be made to come up with that last word, *profit*.

"However, business in the printing industry is getting better all the time. The industry is more profit-minded than ever before.

"World War II experience would indicate that ahead lies considerable difficulty in obtaining machinery and parts. My particular firm has made every effort to build up an adequate inventory of repair-replacement parts; we have felt that that phase of our operation would become increasingly important to our customers. But no repair part supply is inexhaustible.

"My advice to printers for the next six months and more is to keep their equipment in the best possible shape. Replace your machinery now if you need replacements. But make careful *management planning* dictate any and all of your expansion moves."

### STEEL SCRAP NEEDED

"Scrap Turned In Is Steel Turned Out" is the message on every Henry Disston and Sons advertisement—to get steel scrap into the distribution channels. The company has also prepared a leaflet—available without charge—stressing the importance of scrap to the steel industry, and the vital nature of the present emergency. The leaflet differentiates between *production* scrap, which generally flows through the regular channels back to the steel mills, and *dormant* scrap, in the form of obsolete parts and machinery, which is often overlooked.

...For  
letterheads of  
distinction  
and quality



### IT ISN'T SURPRISING—THAT PRINTERS SAY RISING!

If you have a stationery problem take it to your printer. He handles paper every day and can solve your problem with one word—*Rising*.

He knows how this superb paper acts under all conditions. And will unhesitatingly recommend *Rising Bond* for letterheads and forms.

### Rising Bond

- is 25% rag
- comes in 4 weights
- is available in white and 5 colors
- has envelopes in 6 sizes
- And has an excellent printing surface for engraving, lithography, gravure or letterpress

WHEN YOU WANT TO KNOW  
...GO TO AN EXPERT!

### Rising Papers

ASK YOUR PRINTER  
...HE KNOWS PAPER

Rising Paper Company, Housatonic, Mass.

The above advertisement appears in a long list  
of executive and sales promotion magazines

## A Letter about Letterheads

Dear Mr. Printer:

You have a real sales opportunity when a prospect asks you to quote on that all-important stationery item -- "The Business Letterhead." It's an opportunity to spotlight your craftsmanship and printing know-how...to prove your expertise in the selection of paper.

Furthermore, it's an opportunity to demonstrate the distinguished individuality of *Rising Bond*...for outstanding letterheads...for matching second sheets and envelopes. In strength, finish and quality, *Rising* is a letterhead leader...made to take clean, sharp impressions from any standard printing process...in black or any color.

Take along a full assortment of *Rising* samples on that next call for letterhead prices. Your distributor will gladly fill your request.

Sincerely yours,  
R. P.

ASK YOUR PRINTER...HE KNOWS PAPER



### Rising Papers

PRINTING AND TECHNICAL

*An Invitation* TO ALL PRINTERS,  
LITHOGRAPHERS AND THEIR CUSTOMERS...

# TEST IT YOURSELF



Nekoosa Bond advertisements in *The Saturday Evening Post*, *Time*, and *Business Week* are inviting everybody to "TEST IT YOURSELF." Tear it—and feel the built-in strength. Erase on it, typewrite on it, write on it—and you'll appreciate its superb finish. These simple tests cannot duplicate the precision-instrument tests made at our mills. But they will give you a pretty good idea why AMERICA DOES BUSINESS ON NEKOOSA BOND.

Nekoosa-Edwards Paper Company • Port Edwards, Wisconsin.

# NEKOOSA BOND

# SWEEPING THE COUNTRY . . .

*over 600 shipped in recent months*

## The new Junior Jet 17 x 22" Five-fold

### Life-time BAUMFOLDER

5 folding sections . . . 1, 2, 3, 4 or even 5 folds in 1 operation. 60 popular styles of folds, parallels or right angles and, of course, parallels and right angles in the same operation, 4 pages to 24 pages. Multiple folding . . . two or more on and cutting out bleed trims and end trims while folding.



Continuous-feeding  
Suction-Pile Feed

- closest precision construction insures feeding thinnest stock . . . onion skin or Bible stock.

- Perfection in accuracy . . . at highest speed.

- Fastest folder ever built . . . greatest production, therefore greatest profit.

- A little bindery in itself . . . for it's also a lightning-speed Automatic Perforator . . . Automatic Cutter . . . Automatic Scorer . . . Automatic Folder.



Continuous-feeding  
Friction Feed

**Only \$85. initial and \$40. a month for 30 months . . . no finance charge**

(just simple interest 6% per annum on unpaid balance)

**IN THE 50's, THE 60's, THE 70's . . . IT WILL RETURN ITS INVESTMENT MANY TIMES OVER**  
**Why try to do without it . . . how much will it COST you to be THAT foolish?**

**RUSSELL ERNEST BAUM, Inc.**

WORLD'S GREATEST FOLDER VALUES . . . Over 17,000 Baumfolders creating profit daily.

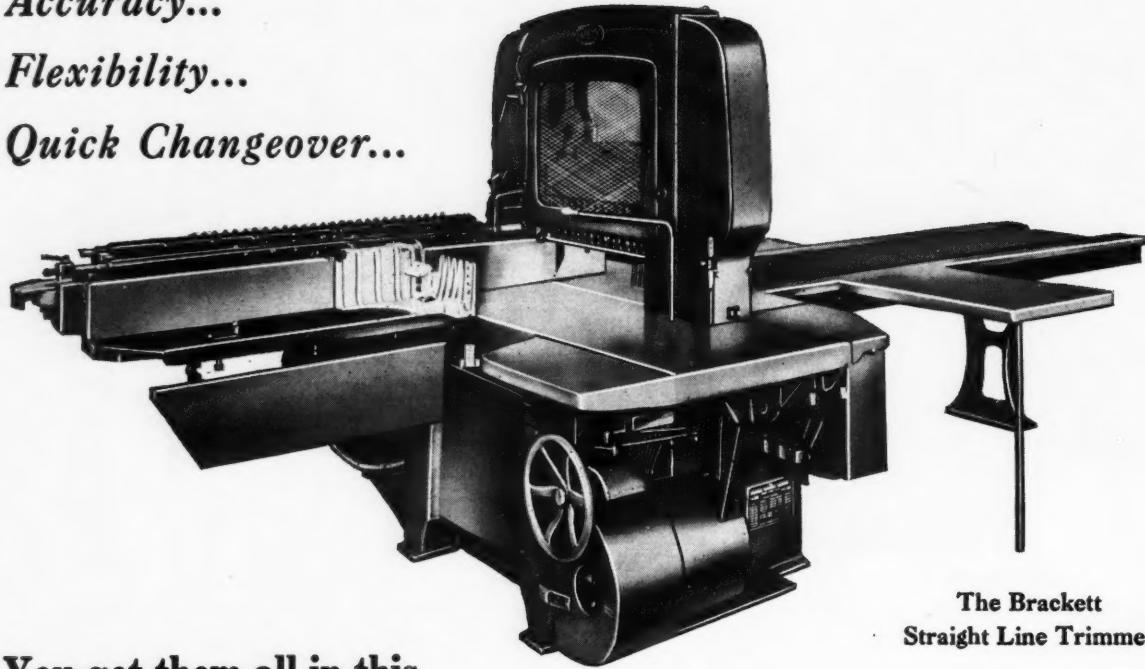
615 CHESTNUT STREET, PHILADELPHIA 6, PA.

*Speed...*

*Accuracy...*

*Flexibility...*

*Quick Changeover...*



The Brackett  
Straight Line Trimmer

You get them all in this

## STRAIGHT LINE PRODUCTION TRIMMER

- Work flows in a straight line — away from the operator.
- He doesn't have to handle either finished work or trimmings. Each moves away from him to rear of machine.
- Waste motion is eliminated.
- Speed of conveyor belt is readily adjusted to fit the job in work.
- Mechanical setting of spacer shaft gives unqualified accuracy. Your run — a hundred or a million — will be precise, right through to the last lift.
- Quick changeover saves setting time. For jobs that repeat, preset gauges may be retained, so that resetting is unnecessary.
- Flexible too — the Brackett handles labels, booklets, (singly or in gangs), inserts, covers, circulars — just about every kind of flat work—at *double or triple* the speed of the conventional guillotine cutter.
- Ask us to show you how the Brackett Trimmer can trim your production costs.

Dexter • Christensen • McCain

*Modern Machines for Printers and Binders*

Dexter Folder Company, General Sales Offices, 330 West 42nd Street, New York 18, N. Y.

Branch Offices, Domestic and Foreign Agents

# NEW DEVICES to simplify the handling of announcements

Very soon the Brightwater Paper Company will have ready for distribution a kit of materials which will make it possible to show card announcement designs and proofs just as they will appear when finished simply by sketching or proving the designs on sheets of text or announcement papers 8½ x 11.

To get one of these kits just ask any paper merchant who distributes Brightwater papers or write to

**BRIGHTWATER PAPER COMPANY**  
**11 West Forty-second St., New York 18, N.Y.**

*Makers of EATONIAN TEXT AND ANNOUNCEMENTS*  
**EATONIAN VELLUM ANNOUNCEMENTS**

RAG CONTENT AND SULPHITE BONDS • LEDGER • MIMEOGRAPH • VELLUM • TEXT PAPERS AND COVER WEIGHTS

**MILLS AT ADAMS, MASSACHUSETTS**

*A Complete Service!*

LETTERPRESS PLATES

ADVERTISING ART

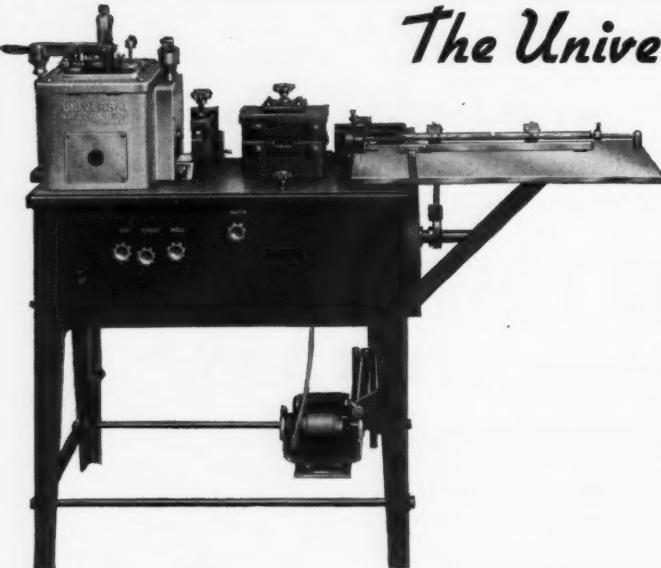
COMMERCIAL PHOTOGRAPHY

OFFSET PLATES

ROTOGRAVURE

## GRAPHIC ARTS CORPORATION OF OHIO

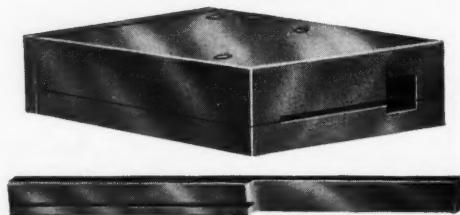
110 OTTAWA STREET • TOLEDO 4, OHIO  
DETROIT NEW YORK CHICAGO



## The Universal Strip Caster

- Improved Method of Casting  
Assures Quality Product—Flexibility—  
Simple Operation.
- INSERTED SLIDE METHOD OF CASTING  
• Reduces the Number of Molds Needed  
and the Cost to the Lowest Minimum.

MODERATELY PRICED

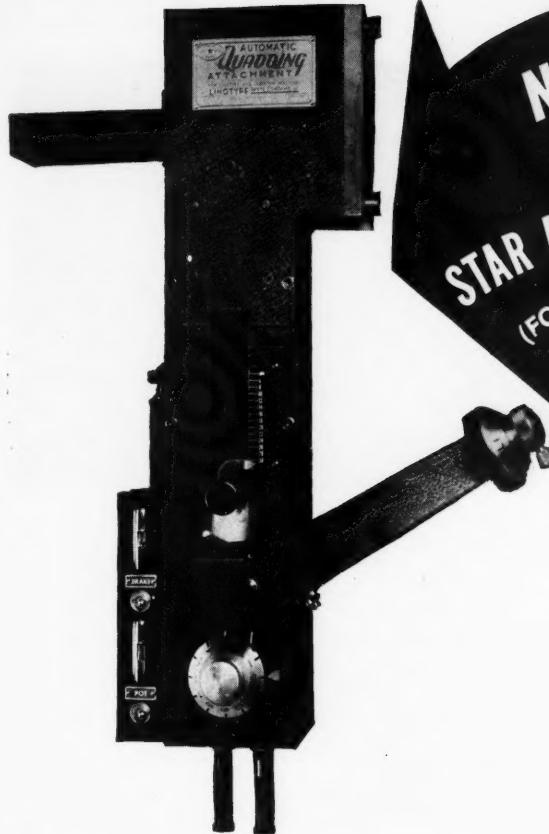


Do you need better broaching rule that will not bend for your Universal Mono-Tabular broach? Leads, slugs and rules especially designed with the proper angles to broach perfectly. Better than any other rules ever manufactured—Let us prove it!

Write for  
Particulars Today

UNIVERSAL MONO-TABULAR CORP.  
DALLAS 1      706 OLIVE STREET      TEXAS

"Precision equipment for  
Particular Printers"



## NEW SAVINGS OFFERED WITH THE NEW MODEL "E" STAR AUTOMATIC QUADDING ATTACHMENT (FOR YOUR LINOTYPE OR INTERTYPE MACHINE)

The new feature permits setting of vise jaws and assembler slide in one operation.

A new brochure, now available, will tell you how it modernizes your old machine and why the investment is never wasted!

The wisdom of an investment is based on its return and not on the expenditure. The Star Quadder not only earns a quick return,—its construction insures a continuance of earnings year after year. It has been proved by widespread use.

PRECISION  
TRADE ★ MARK

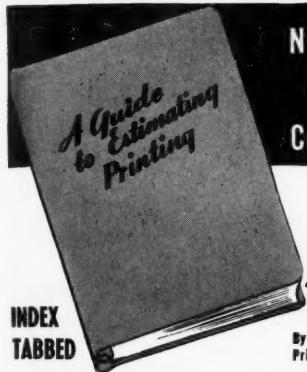
LINOTYPE PARTS COMPANY

INCORPORATED

Factory and Main Office

SOUTH HACKENSACK, N. J.

Branch Office: 1327 BROADWAY, KANSAS CITY 6, MO.  
CHICAGO • MINNEAPOLIS • DENVER • NEW YORK • BOSTON



### New and Scientific Method of Pricing Commercial Printing

NEW REVISED  
EDITION

\$12.50

By RUTHVEN K. SMITH, Graphic Arts Secy.  
Printing Management Engineer

INDEX  
TABBED

★ Price tables and schedules based on years of research, and analysis.

★ Prices based on production records of many cities.

★ Covers copyfitting, paper stock requirements, composition, make-up, lockup and color separation, presswork, ink, cutting, trimming, bindery work, machine ruling, lithography presswork . . . plus other special sections.

★ Saves time, money, prevents errors and omissions, increases customer confidence.

★ Production and hour-cost tables are based on standards—not averages. Both Production-Time and Dollar-Values shown.

★ Indispensable for estimators, salesmen, plant managers, students.

It's simple yet accurate. It's complete yet compact. It's scientific yet easy to use. There's nothing else like it on the market. More than 2,000 printing plant users in U. S. and Canada.

Contains tables for obtaining the amount of material required and the manufacturing costs of the various operations for both letterpress and offset printing.

Estimating classes use it as textbook. Write for discount on group purchases.

You don't have to be an estimator or an engineer to use "A Guide to Estimating Printing" . . . an hour or two of study, to become familiar with the tables, will enable anyone to determine the production time and price of printed jobs. Order your copy today.

THE INLAND PRINTER BOOK DEPARTMENT

309 W. Jackson Blvd., Chicago 6, Illinois



### MAGNIFIERS

Photo-Engravers

Lithographers

Printers

Photographers

10 POWER . . . \$8.50      20 POWER . . . \$10.00

Has a very flat field and great covering power.

THE DOUTHITT CORP.

680 E. Fort St.  
Detroit 26, Mich.

### VANDERCOOK PRE-PRESS EQUIPMENT

Manufactured by the largest producer of proof presses and other pre-press equipment for letterpress, offset and gravure. Write for a catalog.

VANDERCOOK & SONS, INC.

900 North Kilpatrick Avenue • Chicago 51, Illinois



*for your  
Hand Written  
records*

FOR PORTABLE OR COUNTER USE

Write the record on the job with the new Hano All Aluminum Portable Register... it's lighter, tougher and faster.

"LOCKED-IN" COPY CONTROL FOR ACCURATE RECORDS

Stop "lost" copies... Hano Re-folder Registers are available for forms from 4-5/16" x 6" to 8-1/2" x 11"... get your necessary records at a minimum cost per transaction.

**Write Today!**

Get the full story of Hano Registers... ask for your copy of "For Your Handwritten Records"... some open areas for established Stationers or Printers in the South, Midwest and Southwest.

**PHILIP HANO COMPANY, INC.**  
HOYKE, MASSACHUSETTS



Headquarters for  
**CENTAUR**

...and many others of the most desirable type faces in the world. Send for the Centaur Broadside, designed for us by Bruce Rogers. All may be had at the famous type foundry of

**MACKENZIE & HARRIS, Inc.**

659 FOLSOM, SAN FRANCISCO, CALIFORNIA

**MAKE YOUR OWN RUBBER PLATES**

IN THE  
**EVA-PRESS**



- EASY TO OPERATE
- ECONOMICAL
- PRECISION MADE
- FAST

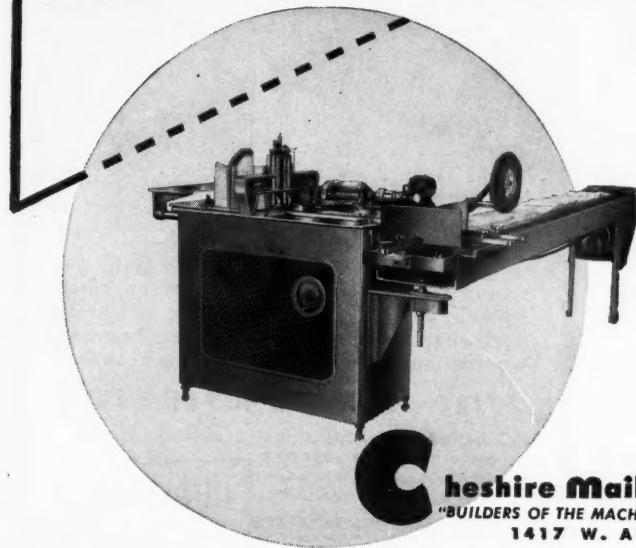
The EVA-PRESS makes it economical for every printer to make and print from rubber plates. Years of development and testing stand behind every EVA-PRESS. A quality press that makes both matrices and rubber plates. Only 4 minutes actual operator's time; 20 minutes vulcanizing while operator does other work. Makes rubber plates of any desired thickness for use in letter-press and offset presses.

**AMERICAN EVATYPE CORP.**

DEERFIELD, ILLINOIS

# E

## LIMINATE YOUR MAILING PROBLEMS! CHESHIRE MACHINES NOW AVAILABLE IN FOUR MODELS TO MEET YOUR NEEDS



# C

Cheshire Mailing Machines, Inc.

"BUILDERS OF THE MACHINE WHICH MADE MAILING OF MASS CIRCULATIONS PROFITABLE."  
1417 W. ALTGELD STREET CHICAGO, ILLINOIS

Cheshire offers the modern answer, regardless of the size of your mailing job. From the largest, high speed machines used for mailing mass-circulation periodicals down to low-cost semi-automatic equipment for fast mailing of letters, folders, pamphlets, etc. There's a size and speed to fit your needs. All automatically cut and attach addressed labels at higher speeds and lower costs. There's flexibility, too—can be used with Addressograph, Speedamat, Elliott, Pollard-Alling and other roll strip methods, as well as with Continuous Pack form labels.

Let Us Survey Your  
Mailing Machine Needs—  
Write Your Requirements

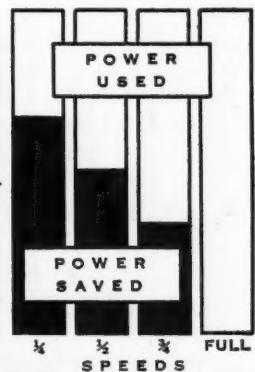
CHESHIRE.

THE MONOMELT COMPANY

THE MONOMELT  
THE PLANE-O-PLATE  
THE HYDRO-CASTER  
MONOMELT POWER SHEARS  
MONOMELT MOLDING PRESSES  
PLASTIC PLATE CURVER  
VINYLITE AND ELECTROTYPERS SUPPLIES  
BAKELITE MATRIX  
(Processed by Monomelt)

1611 W. B. Polk St.  
Minneapolis, Minn.

SAVE  
**POWER**  
WHEN YOU CUT  
**PRESS SPEEDS...**



USE STAR-KIMBLE LK MOTORS

Stepless wide-range speed adjustment in either direction of rotation—merely by shifting motor brushes. The right speed for every press run.

Power consumption reduced in proportion to speed—no power wasted in resistors. Simple, efficient remote control—by convenient hand lever or foot pedal.



Write for Bulletin B302 describing these single-phase, brush-shifting repulsion motors.



**STAR-KIMBLE**

MOTOR DIVISION OF  
MIEHLE PRINTING PRESS & MANUFACTURING CO.

200 Bloomfield Avenue Bloomfield, New Jersey

Distributed by American Type Founders



## VOLAX REMOVES IT IN A JIFFY!

VOLAX was developed for heavy-duty skin cleansing . . . for removing ground-in printer's ink FAST—but gently, without irritating the skin. Contains mild soaps, water softener and friable volcanic ash. A SIMPLE TEST WILL CONVINCE YOU—Ground-in dirt and ink discoloration disappear when VOLAX HAND CLEANER goes to work!

Let your DOLGE SERVICE MAN demonstrate!



### The R & B EXTENSION DELIVERIES

for MIEHLE, BABCOCK, PREMIER  
and other presses

### AUTOMATIC PAPER LIFTS

Special purpose equipment for the  
Graphic Arts Industry

CONSULT US ON YOUR PARTICULAR PROBLEM

**THE RATHBUN & BIRD COMPANY, INC.**  
DESIGNERS AND MANUFACTURERS • FOUNDED 1898  
DEPT. I 379 WEST BROADWAY NEW YORK 12, N.Y.

### PRE-SENSITIZED PLATES HAVE NOW

GROWN UP



Now you can get the speed and economy of pre-sensitized plates for your larger presses. Having proved their usefulness on small presses, offset lithographers can now do a greater variety of work with these easy to handle plates. Everyone who has used them is enthusiastic — you'll be too.

### STILL JUST 2 SIMPLE STEPS

Expose and develop — that's all you do to get a good press plate with these larger sized pre-sensitized plates. Write today for complete information.

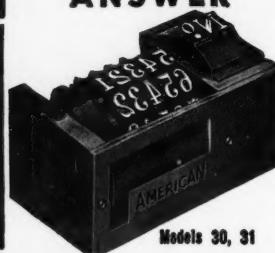
The new Pre-sensitized plates are made by Keuffel and Esser Co. and distributed by Litho Chemical and Supply Company and its dealers from coast-to-coast.



### QUESTION

Which is  
the BEST  
NUMBERING MACHINE  
to USE?

### ANSWER



Models 30, 31

### AMERICAN NUMBERING MACHINE CO.

ATLANTIC AND SHEPHERD AVES. BROOKLYN, N.Y.  
BRANCH—105 WEST MADISON STREET, CHICAGO, ILL.

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WATERMARKED SULPHITE DISTRIBUTED BY LEADING PAPER MERCHANTS

**FLETCHER**  
PAPER COMPANY  
ALPENA, MICHIGAN

# MANIFOLD

- Increase Production from present equipment with



More production from present equipment is the problem of printers today. Many find the answer in the Taylor REG-ISTERSCOPE, a machine based on optical principles which enables your operator quickly to register forms on the imposing surface BEFORE they go to press. The REG-ISTERSCOPE eliminates almost all moves on press, and standing time is reduced to the minimum. Faster starts mean more productive press time, enabling you to meet increased demands without adding new presses.

demands without adding new presses.

Easy to operate, the REGISTERSCOPE will soon pay for its moderate cost and add to your profits through increased production, lower cost per impression. It sets on your conventional semi-steel imposing surface. The REGISTERSCOPE Junior, for printers using smaller presses, handles forms up to 22" x 28". Write for details and price information to:

# TAYLOR MACHINE CO.

**Room 302 • 210 Guilford Avenue • Baltimore 2, Md.**

# WESTERN HONEY- COMB Cylinder for

## **Better Printing On Curved Plates**

- Uniform foundation gives plates proper support
  - This prevents plates from cracking
  - Thousands of holes allow you to hang plates closer
  - Register is improved—there is less paper wastage
  - Permits faster press preparation and better printing
  - In many cases we can honeycomb your old cylinders

**WIRE, WRITE OR PHONE TODAY**

# **WESTERN PRINTING MACHINERY CO.**

**3519 N. SPAULDING AVE.  
CHICAGO 18**

**manufacturers  
of 3rd and 4th color  
units for all Michle  
flat-bed  
presses**

# Albertus

## For the Unusual

For that special job, choose Albertus  
to take it out of the ordinary class.  
Another L. A. Type imported design,  
it is cast in our hard foundry metal.

	Caps	Lower Case	Complete
18-pt.	12A . . \$3.10	24a . . \$4.75	\$7.85
24-pt.	7A . . 3.45	11a . . 3.10	6.55
36-pt.		IN PROCESS	
48-pt.	4A . . 7.70	7a . . 6.60	14.30

**ALBERTUS TITLING (Caps Only)**

24-pt.	9A . . \$6.40
36-pt.	5A . . 7.80
48-pt.	4A . . 10.00

All prices plus 10%<sup>o</sup>

# L. A. Type Founders, Incorporated

**225 E. PICO BLVD. • LOS ANGELES 15, CALIF.**

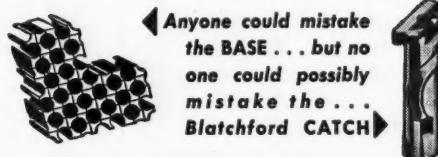
## The "HOLE" is only part of the Story

**BLATCHFORD** originated the "honeycomb" type of base. Others were quick to copy it.

But the "hole" was only part of the Blatchford basic improvement in plate mounting! There was a stronger catch . . . there was a positive anchorage provided in each hole for the catch . . . there was a scientific pattern created to permit margins between plates as small as  $\frac{1}{8}$ -inch with absolute security and rigidity.

It is the whole system . . . rather than the "hole" pattern . . . that makes Blatchford practical, safe, speedy and economical.

**Buy Blatchford . . . and be sure!**



# **E. W. BLATCHFORD CO.**

**Branch of National Lead Company**  
**111 Broadway**                   **900 W. 18th St.**  
**New York 6, N. Y.**              **Chicago 80, Ill.**

# classified buyers' guide

## BINDERY

**Engdahl**  
**Bindery**

DIVISION OF C. O. OWEN & CO.  
EDITION BOOKBINDERS  
"Books Bound by Us Are  
Bound to Satisfy."

2200 Maywood Dr., Maywood, Ill.  
Telephones: Maywood 9000 and  
Estebrook 8-8787 (Chicago)

## BRONZERS

- MILWAUKEE BRONZERS—For all presses. Some rebuilt units. C. H. Henschel Mfg. Co., W. Mineral Street, Milwaukee, Wis.

## BUSINESS OPPORTUNITIES

- WANTED—Parties interested in opening printing houses in India for manufacturing printed packing materials, playing cards, pictures, etc. Very good scope of business. For full particulars contact Famous Cine Litho Works, 40-B, Clerk Road, Jacobs Circle, Bombay 11, India.

## CALENDAR AND CALENDAR PADS

- WHOLESALE CALENDARS, FANS, ADVERTISING NOVELTIES—Do your own imprinting or we do it for you. Sell your regular Printing Customers. Fleming Calendar Co., 6540 Cottage Grove, Chicago 37, Ill.

- CALENDAR PADS—67 Styles and Sizes. Write for catalog. Calendar backs for advertising, sheet pictures. Wiebush Calendar Imp'tg. Co., 80 Franklin St., New York, N. Y.

## ENGRAVINGS

You Are Invited

To send us your inquiries for quotations on original photoengravings...including process color, agency and general commercial work. 125 highly skilled artists and photoengravers assure you of intelligent service.  
Over 50 years of "know how".  
INDIANAPOLIS ENGRAVING CO., INC.  
222 East Ohio Street  
INDIANAPOLIS 6, INDIANA

## FOR SALE

- AN EXTENSIVE LINE of new and rebuilt printing equipment on easy terms. Write for free list. Missouri Central Type Foundry, Wichita, Kans.

- FOR SALE—PERFORATOR. 1 Bench Model 19-in. Nygren-Dahly Rotary Slot Hole Perforator with cabinet and stand. 60 cycle 1 phase G. E. motor A. C. Two 1-8 cut-out cutters. Perfect condition. L. I. Hutchins, Printers, Monmouth, Illinois.

## FOR SALE (continued)

**FOR SALE**

6/0 TC Miehle #11503, with Dexter Feeder & ext. del.  
6/0 SC with Dexter Pile Feeder and ext. del.  
5/0 Miehle for die cutting, Alamo Lift.  
2/0 Miehle, Bed 43" x 56", with Dexter Pile Feeder and ext. del.  
#10 Babcock, 43" x 55", Dexter Pile Feed.  
#4-4 Roll. Miehle Auto., swing back unit.  
"C" Intertype, #12835.  
C35M Intertype #7867  
#8 Linotype, 3 magazines.  
#14 Linotypes, Single Keyboard  
Kelly Presses: #1 22" x 28"—#2 22" x 34"  
B - 17" x 22"  
22" x 28" Miehle Horizontal  
27" x 41" Miller Major No. 5967  
27" x 41" Two-Color Miller  
LSS Harris Offset Press, 35" x 45".  
LSS Harris, 2-color, 46½" x 68½".  
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(Continued on next page)

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(Continued on next page)

*Classified Buyer's Guide (continued)*

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# THE INLAND PRINTER

FIRST PUBLICATION OF ALL THE PRINTING INDUSTRY

VOLUME 127 • JULY, 1951 • Number 4

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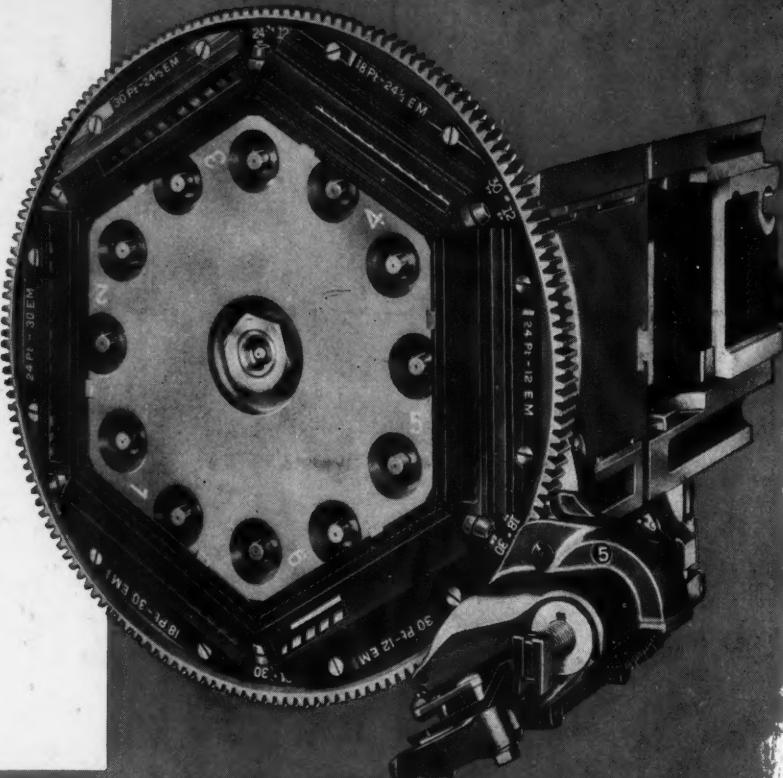
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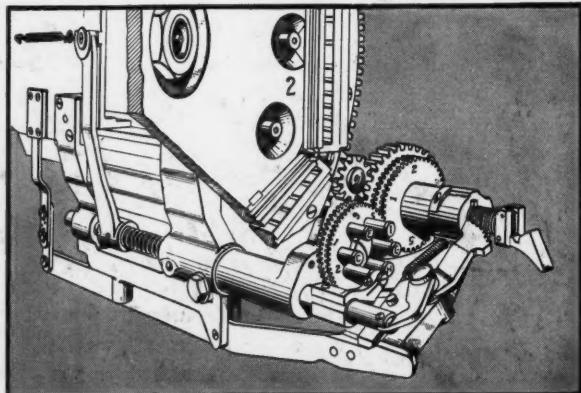
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